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DOING DRUGS AND DROPPING OUT

A REPORT

PREPARED FOR THE USE OF THE

SUBCOMMITTEE ON ECONOMIC GROWTH, TRADE, AND TAXES

OF THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

AUGUST 1991

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LETTER OF TRANSMITTAL

AUGUST 1991.

Hon. Paul S. Sarbanes,
Chairman, Joint Economic Committee, Congress of the United States, Washington, D.C.

Dear MR. CHAIRMAN: Despite some indication of reduced drug use, Oakland's record $1.5 billion seizure of heroin in June confirms what most law enforcement officials are saying—that the drug crisis continues relentlessly to plague America. A missing component in efforts to marshal sufficient resources to combat this plague is a full accounting of costs imposed on society by the illegal drug epidemic. For that reason, I am pleased to transmit herewith a report prepared by the Center for Regional Studies at Baylor University in Waco, Texas, titled "Doing Drugs and Dropping Out."

The report contains the most comprehensive calculation yet made of the total cost to society of illegal drugs in terms of poor health, labor force loss, and law enforcement outlays. It updates previous studies, and includes cost estimates for the special tragedies of drug babies and the drug-related spread of the HIV virus. The report also calls for expanded outpatient treatment care of drug users, and expansion of peer presssure education programs to stem adolescent drug abuse and school dropouts. It concludes with an extensive examination of drug programs and use in Waco, Texas.

The report was directed by Professor Glen E. Lich, with contributions by Lawrence G. Felice, Nancy Reese Harrison, James W. Henderson, Kathleen Green Gardner, Bryant Markette, and David Swenson.

The report represents the views of the authors and does not necessarily reflect the views of the subcommittee.

Sincerely,

Lloyd Bentsen,
Chairman, Subcommittee on Economic
Growth, Trade, and Taxes.

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"HISTORY IS NOT A SAD STORY

AS LONG AS THERE IS ANOTHER GENERATION

TO TELL IT TO."

— ROBERT FLYNN, *Texas Novelist*

Doing Drugs and Dropping Out

A REPORT

ASSESSING THE COSTS TO SOCIETY OF
SUBSTANCE ABUSE AND DROPPING OUT OF SCHOOL

DRAWN FROM DATA FROM A VARIETY OF SOURCES IN TEXAS, NEW MEXICO,
ARIZONA, AND CALIFORNIA, INCLUDING STATE AND MUNICIPAL GOVERNMENTS,
COMMUNITY LEADERS, SCHOOLS, AND DRUG ABUSE PROFESSIONALS

PROJECT DIRECTOR

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BAYLOR UNIVERSITY

1991

EXECUTIVE SUMMARY

GLEN E. LICH

Visiting Professor of Regional Studies at Baylor University, Secretary of State Professor of Multicultural
and German-Canadian Studies at The University of Winnipeg, and
Senior Research Fellow at the Center
for Socioeconomic Research at the
University of Coahuila

This report concludes a two-phase assignment, which the Joint Economic Committee asked the Regional Studies Center at Baylor University to carry out, assessing the **costs to society of substance abuse**—especially cocaine and crack addiction—and dropping out of school. This report draws on data from a variety of sources in Texas, New Mexico, Arizona, and California—including state and municipal governments, community leaders, schools, and drug abuse professionals. The report is organized around three central questions.

- What is the impact of cocaine and crack abuse in terms of crime, present and prospective public spending, and lost productivity?

- What policies have successfully moved addicts away from crack?

and

- What policies have successfully reduced the high school dropout rate?

With regard to the **first** question, the report quantifies a "bottom-line" cost of drug abuse in dollar terms based on extant literature in the field. However, because of the vast differences in methodologies used to obtain cost estimates from one study to the next, this figure has a broad range: based on the research surveyed, total economic costs of drug abuse in the U.S. were between $60.4 billion and $124.9 billion in 1988. This figure reflects the costs to the U.S. economy of health care, economic loss, and law enforcement relating to substance abuse—as summarized in the table below:

Summary Estimates of the Economic Costs of Drug Abuse, 1988
Various Sources (in billions of dollars)

Category	High Estimate	Low Estimate
Health care costs		
Medical costs to business	$ 15.2 [a]	$ 2.7 [f]
ICU costs of drug-exposed infants	10.5 [b]	2.8 [g]
Total cost of AIDS	6.5 [c]	2.3 [h]
Total health care costs	$ 32.2	$ 7.8
Work force costs		
Reduced productivity and employment loss	48.7 [d]	10.2 [i]
Law enforcement costs		
Crime (including lost productivity for the incarcerated)	44.0 [e]	42.4 [j]
Total economic costs of drug abuse	$124.9	$ 60.4

Sources:

[a] Total health care expenditures from Arnett, et al. (1987), prevalence rates from Harwood, et al. (1984), and relative costs of drug abusing employees compared with non-abusers from deBernardo (1988).

[b] ICU costs from Chasnoff, et al. (1989) assuming 375,000 drug-exposed infants born annually.

[c] Extrapolated from data presented in Scitovsky and Rice (1987).

[d] Estimated using one percent of 1988 GNP (Harwood, et al., 1984).

[e] From estimates of crime costs of narcotics addicts provided in Deschenes, Anglin, and Speckart (1988), assuming 2.2 million cocaine addicts.

[f] Direct medical treatment costs from Rice, et al. (1990).

[g] ICU costs from Chasnoff, et al. (1989) assuming 100,000 drug-exposed infants born annually.

[h] Direct and indirect medical costs of treating AIDS patients from Rice, et al. (1990).

[i] Reduced productivity and employment loss from Rice, et al. (1990).

[j] Total crime costs from Rice, et al. (1990).

Though the costs are assessed in the first chapter of this report, no attempt is made to use economic principles to answer questions of optimal allocation of resources. Therefore, this chapter could be classified as a cost-identification chapter. "Impact" is assessed also in terms of private and social issues; the author of this first section calls for realism in formulating national goals. In evaluating the success of policies which have effectively moved addicts away from drugs, important questions concerning criteria for success, motivation for drug use, and addiction—psychological or physiological—are explored. With regard to this **second** question, the author evaluates law enforcement, treatment, and education and prevention policies. The second author also reviews current literature on testing, outpatient treatment, and—placing emphasis on this point—*peer programs* to reduce the motivation toward drug abuse and to move addicts away from cocaine and crack. The **third** author, who responds to the question on drop-out retention, recommends a rethinking of the structure of high schools within a collaborative context involving parents, school, and community.

Additionally, this report contains a working bibliography and a community service booklet which deals with the questions of this report on a local community level for the city of Waco, Texas. That report, entitled *A Question of Community: Waco and Drugs*, was funded by a local philanthropic foundation and effected by a city and university coalition.

The central recommendation of this study is threefold: We call for an extensive and honest search for fact; we strongly encourage the building of cooperative networks for the exchange and evaluation of information, experience, and local policy; and we recommend that hearings be scheduled on community approaches to drugs and education. We make this recommendation in the context of what we suspect may be a crisis far graver than cocaine abuse in terms of *values* and *national well-being* than the issues of drugs and dropping out of school are in terms of fiscal drain on the society.

The two phases of this project—October 1989 through June 1990, and July 1990 through March 1991—had the following objectives: *(1)* During the first phase, a research team at Baylor University launched a four-state survey to gather information from a wide variety of sources able to answer parts or all of the three questions cited above and compiled a draft of a manuscript documenting the state of work at the end of June 1990. *(2)* During the second phase, the project director, the research staff, and field readers in various professions in the four states reviewed the manuscript's recommendations for the development and implementation of policies on drugs and education.

During both phases, then, this report represents both a process and a product: a *process* because it is a common-sense, grassroots effort for and by concerned citizens, teachers, community leaders, and drug-abuse professionals to put their thoughts together on two of the key issues—education and drugs—which confront Americans; a *product* because it is the voice of many and because it is intended to advise practicable policy for communities and for the nation.

Incorporated into this four-state survey is a Waco, Texas, core study which was published as a separate community-service booklet entitled *A Question of Community: Waco and Drugs;* this localized study adds depth and realism—and the hope borne of cutting problems down to size—to an otherwise overwhelming inquiry into the two persistent, though sometimes seemingly abstract and remote, national problems of drug abuse and public education.

The question of whether a community can do something to make a difference—the heart of the study funded by the Cooper Foundation in Waco and implemented through a city and university coalition—invites serious consideration. Central to any response on the local level to that question is the combined need to understand the **source** of the issue (to know where to apply one's own work) and to measure the **results** on a personal basis (in the lives of the people who are a community). The Waco study, then, brings this larger project onto a "hometown" scale and reminds us that the strength of this endeavor is in the networking and the dialog.

In conclusion, the real problem of drug abuse is interrelated with—and is a symptom of—a number of domestic social problems. Even though the all-encompassing set of problems associated with drug abuse looms large and unmanageable, we must break this enormity down into smaller, more comprehensible, and more manageable components. Apart from such a method, there seems to be no one right way of addressing the problems which beset the country. When methods work in this or that school or neighborhood or town, the common element of success is often little more than individual involvement—a policeman, a teacher, a professional counselor, or a parent resolute, practical, and possessed of enough guts to make a difference. Those programs which have positive effects are successful, it seems, because of commitment and caring. On levels higher than interpersonal and community, the nation cannot ignore the lessons of what works at the grass roots.

We have to marshal—bring together in an effective way—the national will with regard to the nation's health and happiness. More than anything, we have to develop policies which will and can put drugs in their place: behind such matters as *(1)* what constitutes and sustains community; *(2)* what are the most effective ways to engage students in learning and healthful living and to teach what Hannah Arendt would call *praxis*; and *(3)* what dynamic combinations of community, state, and federal levels of education, prevention, and treatment programs are necessary both in the near and long term. The war on drugs has been a failure because it is flawed in logic and nature. We have through its negative concept raised violence, assured high profits, and done little to counter demand. We must confront the truths that drugs are big business; that our policy has not been effective in reducing supply even as it has not reduced demand; that we have educated negatively, cynically, and hypocritically—often offering young people little more than bread and circuses along with the incentive to avoid drugs in order to get an education to assure themselves higher salaries, a justification for learning which demeans education and loses sight of the economic realities of drug dealing.

Furthermore, as to the often unadmitted assumption that crack is a problem mainly of poor, urban minorities, evidence suggests strongly that the drug has effortlessly crossed racial and socioeconomic boundaries and increasingly affects most segments of American society, thereby precipitating increasing losses of human and other resources.

We must try to work through assumptions and look into studies based upon facts and open dialog. The recent report, *Code Blue: Uniting for Healthier Youth* [1], addresses the physical and emotional well-being of America's youth and raises serious doubts about a younger generation's capability for success and successorship. Besides its actual content, however, *Code Blue* is doubly worthwhile because it gets behind issues like drugs, pregnancy, and teenage suicide—the symptoms, the report says, of a generation's fall from health—to ask fundamental questions about national values and education in this country.

On a state level, the series entitled *Texas in the 21st Century:Building a Future for the Children of Texas*—sponsored by the Texas Committee for the Humanities, the National Endowment for the Humanities, and a consortium of universities—includes a volume bearing the title *The Humanities and Public Issues* [2]. This volume does not identify drugs as a primary issue. Instead, it addresses the economy, the environment, the family, community, cultural pluralism, civic interaction, and equality of opportunity. The significant absence of drugs as a primary issue in a project which resulted from the combined efforts of nearly a hundred leaders across the state and which polled members of the Texas delegation in Washington as well as state legislators in Austin implies that drug abuse and to an extent also dropping out of school are **symptomatic** of even more serious underlying social problems.

How, then, should we discuss drugs? How should we formulate policy to reduce use, abuse, and addiction and to retain young people in schools?

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[1] National Association of State Boards of Education and American Medical Association. Alexandria, Va., 1990

[2] Lich. Vol. 3. Austin, Tx., 1990.

Such studies as *Code Blue* and *The Humanities and Public Issues* warn that because we are failing to recognize the real dimensions of our problems with drugs and education and the real basis of these problems, our attempts at resolution are piecemeal, superficial, and therefore not as effective as these attempts could be, given current expenditures of human and fiscal resources. Such studies not only sensitize us by helping us to see more clearly; they also afford perspective.

Try as we might to quantify the near- and long-term costs of addiction and dropping out of school, whether in terms of the effects alone or in terms of lost human potential, the discussion surrounding these issues takes place **in the absence of essential fact**. We lack acceptable and comprehensible statistics. We do not know definitively how cocaine and crack affect abusers physically, emotionally, or financially—especially in the long term.

As an illegal, underground activity, drug abuse is difficult, sometimes impossible, to measure and to study. However, we must not effect policy on the basis of less than optimal information. Yet how do we determine what our questions are and which ones we are leaving out? what methods are used to obtain data? whether the results are subjected to standard reliability criteria? to what extent we rely on single-agency information and to what extent our understandings are limited by "group think"? what does it mean when seemingly every mayor in the country reports that 60 (or 70 or 80) percent of the arrests in his or her city are "drug-related"?

Problems which appear so large and so capable of almost infinite self-replication intimidate us into believing that whatever available resources we could or would commit will never be enough. It is probably true that no amount of money will solve these problems, particularly if we continue to attack symptoms. Yet measuring the amount and identifying the types of resources being committed to the problems of drugs and drug abusers must precede policy development, allowing policy makers to evaluate what is being done and to identify policies which achieve results. The process by which this is done is useful in establishing dialog and, through dialog, in developing adequate courses of action. In that sense, studies like the recent report from the Senate Judiciary Committee entitled "Hard-Core Cocaine Addicts: Measuring—and Fighting—the Epidemic" [3] raise the question of numbers in ways which are germane to policy discussion because they prompt us to ask ourselves how many cocaine and crack addicts there are in the United States and whether we are willing to live with the effects that this number translates into on a neighborhood and community basis.

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[3] U.S. Congress. Senate. Committee on Judiciary. 1990

CHAPTER ONE

ECONOMIC IMPACT OF CRACK AND COCAINE ABUSE: PRIVATE AND SOCIAL ISSUES

JAMES W. HENDERSON

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Executive Summary

President Bush's recently announced drug strategy includes federal spending of $10.6 billion in 1991. Public policy and resource allocation are being driven by the assumption that the drug problem is primarily an interdiction problem and not a public health problem. As a result, the bulk of public spending goes to law enforcement, criminal prosecution, and incarceration as opposed to education, prevention, treatment, and rehabilitation.

A vocal segment of society argues that we have given the problem our best shot and have failed; that what we have is a public health crisis; and that resources should therefore be channelied into education and rehabilitation instead of law enforcement. Some will also argue for legalization or decriminalization. Legalization would increase availability and eliminate all criminal sanctions (which for many are the only moral sanctions which exist). Whether legalization would reduce prices as many contend is an issue explored by David Musto[4]. Contrary to popular opinion, Musto's research suggests that "anything less than open access" will result in street-level prices remaining at about current levels. In addition, many contend that legalization would also result in an increase in

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[4] "Illicit Price of Cocaine in Two Eras: 1908-14 and 1982-89." *Connecticut Medicine* 54, June 1990, 321-326

abuse and therefore in addiction, followed by increases in the economic costs associated with drug abuse[5].

There has also been a tendency among policy makers to ignore the behavioral and biomedical aspects of cocaine abuse and to view the problem in terms of law enforcement, interdiction, and morality. The national strategy must include strict law enforcement at the street level to make it difficult for abusers to make purchases and a significant increase in rehabilitation facilities. Only by increasing the cost of making a "score" does the prospect of rehabilitation become viable. A publication sponsored by Congress recommends that a workable or practical strategy must include a significant increase in drug treatment facilities to reduce the waiting time for admission from months to days[6].

Nature of Economic Costs: Analytical Concepts and Tools

The application of economic principles to cost-effectiveness and cost-benefit studies emphasizes the importance of dealing accurately with the concept of cost. Policymakers must be willing to apply the tools of economic analysis in evaluating outcomes and identifying costs because a methodology that looks only at the expected gain is a prescription for excess spending and inappropriate use of scarce resources.

This chapter could be classified as a cost-identification study. It simply asks the question, "What is the cost?" Its purpose is not to evaluate alternative solutions, but rather to quantify the economic burden of cocaine and crack abuse.

The question of "Who pays?" is also of interest in this type of study. The point of view taken—from that of the individual or that of society—will determine which costs are considered. The individual costs include the amount spent on acquiring drugs, the health and medical costs of abuse, reduced productivity, and lost employment caused by premature death or disability. Social costs, often referred to as opportunity costs, represent foregone opportunities to use resources for other purposes. These can be estimated in part by the amount of public spending on drug education, treatment, rehabilitation, and control.

Costs are either direct or indirect. Direct costs represent resources consumed where real dollar payments are made. Indirect costs do not result in actual formal payments, but nonetheless represent resources used. Indirect costs are a major concern in evaluating the overall costs of cocaine abuse. These include the costs of long-term disability and premature death resulting from prolonged abuse of cocaine. The costs that result from drug-related criminal activity include the value of property damaged or destroyed and the costs associated with maintaining the criminal justice system. Indirect costs include the opportunity cost of time spent in prison. Finally, the intangible costs of pain and suffering of the affected individuals and their families are not readily measured. These intangibles will be discussed, but no attempt will be made to place a dollar value on them.

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[5] Nahas. *Cocaine: The Great White Plague*. Middlebury, VT. 1989

[6] House. *Efficacy of Drug Abuse Treatment Programs* (Part 1), Hearing before the Select Committee on Narcotics Abuse and Control, 1989

The goal of this study is to understand the nature and magnitude of the economic costs to the individual and society of cocaine and crack abuse. No attempt will be made to use economic principles and concepts to answer questions concerning the optimal allocation of resources. Such policy decisions can only be based on marginal analysis, specific cost-benefit studies examining specific policy options.

Introduction

A recent Senate report[7] estimates the number of hard core (frequency of use once or more per week) cocaine addicts in the U.S. at 2.2 million—about one percent of the population. This number is almost three times the previous estimates from the National Institute on Drug Abuse study entitled *National Household Survey on Drug Abuse* (Rockville, Md., 1988)[8]

Drug abuse takes a high toll in terms of human suffering. Although total costs may be beyond our ability to comprehend, much less quantify, the purpose of this chapter is to identify and quantify the economic costs of cocaine and crack abuse, with costs categorized into three areas: health costs, labor force costs, and law enforcement costs[9]

Impact of Cocaine and Crack Use on Health

Today, the highest usage rates of cocaine in the United States are among young adults between the ages of 18 and 25 years[10]. but the National Institute of Drug Abuse survey of high school seniors revealed that 17.6 percent of the males and 14.7 percent of the females admit to having used cocaine during the past year.

The most popular means of taking the drug is via snorting (intranasal), but is also commonly ingested, injected, smoked, or administered through any of the mucous membranes[11]. Within the past decade, the introduction of "crack," a smokeable form of cocaine, and the escalation of the AIDS epidemic have in combination resulted in a change in the habits of regular users: fewer are injecting, more are smoking.

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[7] U.S. Congress. Committee on the Judiciary. "Hard-Core Cocaine Addicts: Measuring—and Fighting—the Epidemic." 1990

[8] Many researchers consider these latest estimates more accurate than those from the *Household Survey* since they include three groups previously ignored: people receiving treatment in institutional settings, the homeless, and those incarcerated in the nation's penal institutions. But, other researchers hold that this estimate is exaggerated by its definition of addiction: use of cocaine once a week or more.

[9] A fourth area of economic impact that has only recently been identified (Beaty 1989) is the flow of large amounts of surplus cash into the U.S. banking system. Over $8 billion in surplus cash has accumulated in four Federal Reserve banks: Miami, Los Angeles, Jacksonville, and San Antonio. The macro effect on the local economies of this money laundering is seen in an increase in the number of cash sales of real estate, automobiles, and boats. This results in inflated prices and escalating property values.

[10] Abelson and Miller. *A Decade of Trends in Cocaine Use in the Household Population.* National Institute of Drug Abuse Research Monograph Series 61. Rockville, Md., 1985; Goldstein. *Frequency of Cocaine Use and Violence: A Comparison Between Men and Women.* National Institute of Drug Abuse Research Monograph Series 91. Rockville, Md., 1989; Johnston, Bachman, and O'Malley. *Drug Use, Drinking, and Smoking: National Survey Results from High School, College, and Young Adult Populations, 1975-1988.* Rockville, Md., 1989

[11] Seigel. "Cocaine Smoking." *New England Journal of Medicine* 300, 1979; *Journal of Psychoactive Drugs* 14, 1982

Among the many reasons cited to justify the use of cocaine are mild euphoria, increased alertness, decreased appetite, and enhanced energy. However, recent works indicate that the administration of cocaine, even in recreational doses, can result in sleep disorders, assaultive behavior, delirium, nausea, vomiting, chest pain, tremors, seizures, hypertension, hyperthermia, respiratory paralysis, cardiac arrhythmias, and death[12].

The popularity of the drug may be attributable to the widespread belief that it is nonaddictive and quite harmless when administered occasionally. However, evidence compiled from animal studies conducted by Bozarth and Wise[13] and Deneau, et al[14] show cocaine to be a powerful reinforcing drug whose properties may lead to a pattern of compulsive use.

The two most widely abused drugs in the United States today are alcohol and nicotine. The debilitating effects of these two drugs take years to manifest themselves in the individual—40 years of smoking cigarettes before the cumulative impact of lung cancer or other respiratory diseases is realized; 10-12 years of alcohol abuse before the alcoholic becomes totally dysfunctional. By comparison, data from the National Institute of Drug Abuse indicate that a non-regular user of cocaine (intranasal administration) becomes dysfunctional in seven years. For the crack smoker, it takes only 6-8 weeks[15].

Individual Consequences

The medical community has only within the past decade begun to understand the serious coronary risk of cocaine abuse. Even those who have no previous history of heart disease assume considerable risk by taking the drug which produces an increase in heart rate, systolic blood pressure, and myocardial oxygen demand.

But the adverse effects of cocaine abuse do not end with acute coronary events. At least two million women in the United States—most between the childbearing ages of 20 and 27 years—use cocaine and crack[16]. Chasnoff, et al., in two separate studies[17] estimate that 11 percent of all births in the United States were to drug users and that 10 percent of the four million regular users are pregnant women.

Evidence compiled by Culver, et al.[18] and Neerhof, et al.[19] indicate that this increased incidence of drug abuse has serious consequences for the infants exposed *in*

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[12] Cregler and Mark. "Cardiovascular Dangers of Cocaine Abuse." *American Journal of Cardiology* 57, 1986; Gawin. "Cocaine Abuse and Addiction." *Journal of Family Practice* 29, 1989; Grinspoon and Bakalar. "Adverse Effects of Cocaine: Selected Issues." *Annals of the New York Academy of Science* 362, 1981; Pollin. "The Danger of Cocaine." *Journal of the American Medical Association* 254, 1985

[13] "Toxicity Associated with Long-Term Intravenous Heroin and Cocaine Self-Administration in the Rat." *Journal of the American Medical Association* 254, 1985

[14] "Self-administration of Psychoactive Substances by the Monkey." *Psychopharmacologia* 16, 1969

[15] Freudenheim. "Workers' Substance Abuse is Increasing, Survey Says." *New York Times*, 1988

[16] Johnston, Bachman, and O'Malley. *Drug Use, Drinking, and Smoking: National Survey Results from High School, College, and Young Adult Populations, 1975-1988*. Rockville, Md., 1989

[17] "Temporal Patterns on Cocaine Use in Pregnancy." *Journal of the American Medical Association* 261, 1989; "Cocaine Use in Pregnancy." *New England Journal of Medicine* 314, 1985

[18] "Lymphocyte Abnormalities in Infants Born to Drug-Abusing Mothers." *Journal of Pediatrics* 111, 1987

utero, resulting in restricted blood flow to the fetus[20], low birth weights in newborns (Chouteau, et al. "The Effect of Cocaine Abuse on Birth Weight and Gestational Age." *Obstetrics and Gynecology* 72, 1988), congenital malformations (Chasnoff, et al. "Temporal Patterns on Cocaine Use in Pregnancy." *Journal of the American Medical Association* 261, 1989; "Cocaine Use in Pregnancy." *New England Journal of Medicine* 314, 1985), serious gastro-intestinal problems, and smaller head circumferences.

Dramatic effects on health have also been measured among users of intravenous cocaine injections. Gawin reports findings of thrombosis, hepatitis, acquired immune deficiency syndrome (AIDS) and AIDS-related complex, local sepsis, abscess, angitis, endocarditis, and septicemia ("Cocaine Abuse and Addiction." *Journal of Family Practice* 29, 1989).

Economic Costs of Cocaine and Crack Use

In the past decade there have been two major studies examining the economic costs of drug abuse to the U.S. economy. The first was a study from the Research Triangle Institute (RTI) by Hendrick Harwood, et al., (*Economic Costs to Society of Alcohol and Drug Abuse and Mental Illness: 1980*. Research Triangle Park, N.C., 1984). The more recent study was conducted through the Institute for Health and Aging at the University of California at San Francisco (UCSF) by Rice, et al., (*The Economic Costs of Alcohol and Drug Abuse and Mental Illness: 1985*. San Francisco, CA, 1990). These two studies and subsequent testimony by Harwood before the Congressional Joint Economic Committee (*The Cost to the U.S. Economy of Drug Abuse*, 1985) provide much of the basis for the macro estimates of the cost to society.

The general research methodologies used in the two key studies are similar, but the details of the loss calculations differ. Differences in data sets, prevalence rates, and impairment rates result in different estimates for the total cost of drug abuse. The RTI study estimates the total cost of abuse of the various types of illegal drugs (primarily, marijuana, cocaine, LSD, PCP, heroin, and other opiates) at $47 billion in 1980. UCSF estimates 1985 drug costs at $44 billion, with 1988 updates increasing the total to $58.3 billion. It is important to keep these figures in perspective. Using comparable assumptions, Rice, et al., ("The Economic Cost of Illness: A Replication and Update." *Health Care Financing Review* 7, 1985) estimate the cost of circulatory diseases for that year at $80 billion and cancer costs at $46 billion. (For both of these, cigarette smoking is a major contributing factor). Motor vehicle accidents cost the economy about $50 billion.

It should also be noted that, because the RTI and USCF reports estimate the economic costs of the health effects of drug abuse, the money actually spent for the purchase of these drugs is not included in the total cost estimates. In discussing the issue of economic costs, it is only reasonable that we consider the benefits of the illegal drug industry as an economic activity. With the retail mark-up such a large percentage of the street-level price, a significant amount of the profits filter back into the local economy in the form of spending on other goods and services. Not only do dealers buy expensive sportswear in inner-city stores, they also purchase real estate, automobiles, and boats

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[19] "Cocaine Abuse During Pregnancy: Peripartum Prevalence and Perinatal Outcome." *American Journal of Obstetrics and Gynecology* 161, 1989

[20] Weaver, et al. "Effects of Magnesium on Cocaine-Induced, Catecholamine-Mediated Platelet and Vascular Response in Term Pregnant Ewes." *American Journal of Obstetrics and Gynecology* 161, 1989

(often paying cash). However, if the U.S. experience is similar to that of Latin America, the spending does not have the same multiplier effect as legitimate forms of activity since at least a portion is in turn used for personal drug consumption. Most takes the form of consumption expenditures and little is reinvested in productivity-enhancing activity.

The economic costs of drug abuse will be discussed according to its three major components: health care costs, labor market costs, and law enforcement costs (including the costs of crime). Separation of costs by type of drug has not been the major focus of previous research, where feasible, those distinctions will be made. Reconciling the major research findings can present conceptual problems. To the greatest extent possible, attempts will be made to identify the sources of the differences in the discussions below.

Health Care Issues

Substance abuse is the leading health cost problem in the U.S. today. Harwood, in his testimony before Congress (*The Cost to the U.S. Economy of Drug Abuse*, 1985), states that over 60 percent of health care costs are devoted to the treatment of three categories of drugs—alcohol, nicotine, and illegal drugs. The health problems associated with these drugs include heart disease, emphysema, lung and other cancers, motor vehicle accidents, and birth defects.

In those same hearings, Rowland Austin of the General Motors Corporation relates that of the $2 billion spent by GM on health care, approximately 30 percent was alcohol or drug related. Overall, between 30 percent and 35 percent of GM's work force is known to have problems with alcohol or other drugs. A more recent GM study reported by Freudenheim ("Workers' Substance Abuse is Increasing, Survey Says." *New York Times*, 1988) confirms that the annual cost of substance abuse to the company is estimated to be $600 million, or more than $1,271 for each of its 472,000 employees.

The major effect of abuse is an increase in the probability of on-the-job injury and increased absences. A five-year study that examined the work performance of 44,000 of GM's hourly employees showed that seven percent were absent an average of 93 days per year for which they received paid sickness and accidental health benefits. The firm estimates that 60 percent of those with these high rates of absence were absent because of alcohol or drug related problems.

The Research Triangle Institute's study conducted by Harwood, et al., (*Economic Costs to Society of Alcohol and Drug Abuse and Mental Illness: 1980*. Research Triangle Park, N.C., 1984) provides insight into how costs are broken down into health-care, work place, and law-enforcement components. Of the $47 billion cost of drug abuse in 1980, only $1.4 billion represented expenditures for direct medical treatment and support. That amount included the costs of diagnosis, treatment, continuing care, rehabilitation, and terminal care for drug-related illness and trauma. Rice, et al., (*The Economic Costs of Alcohol and Drug Abuse and Mental Illness: 1985*. San Francisco, CA, 1990) estimate medical costs at $3.1 billion in 1985. Using their adjustment factors, 1988 costs are estimated at $5.0 billion (this includes the increased costs due to AIDS).

If the level of these costs seem low, it should be understood that medical knowledge of drug abuse and the health problems associated with it are not nearly as advanced as that for alcohol abuse. Marijuana is the most widely studied illegal substance, and more is known about its effects on health than any other illegal drug (Institute of Medicine. *Marijuana and Health*. Washington, D.C., 1982). Even so, our knowledge of marijuana is still not extensive. In comparison, the biological effects of cocaine is even less understood.

A look at this issue from another perspective reveals a somewhat different story. A report from the U.S. Chamber of Commerce (de Bernardo. *Drug Abuse in the Workplace: An Employer's Guide to Prevention*, 2nd ed., 1988) estimates that the typical drug abuser has medical costs that are three times that of the typical non-abuser. Using this relationship and assuming that five percent of the work force are drug abusers (Harwood, et al., *Economic Costs to Society of Alcohol and Drug Abuse and Mental Illness: 1980*. Research Triangle Park, N.C., 1984), the extra medical costs attributable to drug abuse that business must pay are estimated to be $15.2 billion in 1988 (Arnett, Freeland, McKusick, and Waldo. "National Health Expenditures, 1986-2000." *Health Care Financing Review* 9, 1987).

The RTI study does not adequately measure two emerging areas of health costs associated with cocaine-exposed infants and the spread of AIDS into the intravenous (IV) drug–using population because the rates for such disorders were much lower at the time of the report. The incidence of maternal drug use is not easy to detect. Drug screening is not a routine procedure in many hospital settings. In any event, recent cocaine use is not always obvious since it does not show up in urine tests conducted 48 hours after use. The economic costs of cocaine exposure *in utero* are based on studies by the state of Florida reported in hearings before Congress (House. *Cocaine Babies*. Hearing before the Select Committee on Narcotics Abuse and Control, 1987).

The typical drug-exposed infant will spend four to six weeks in an intensive care unit (ICU) after birth at a cost of $28,000 (1987 dollars). It is not unusual for extremely low birth weight babies to have total hospital costs of up to $100,000. On the basis of figures gathered by Chasnoff, et al. ("Temporal Patterns on Cocaine Use in Pregnancy." *Journal of the American Medical Association* 261, 1989), estimates of 375,000 annual births to cocaine-using women and an average ICU charge of $28,000, total estimated ICU charges for U.S. cocaine babies amount to $10.5 billion per year (i.e., $0.7 billion per 25,000 drug-exposed infants).

Furthermore, medical evidence indicates that these same babies present care problems as soon as they are discharged from the hospital. They are either highly irritable or extremely listless. Given the high probability that both parents are drug abusers, the infants are often subject to neglect and abuse. As they grow older, additional costs can be associated with the developmental difficulties they experience: they tend to be hyperactive, slow in learning to talk, and disorganized in everything they do.

The state of Florida estimates that it will spend $700 million on the 17,500 cocaine-exposed infants born in 1987 to prepare them to enter kindergarten. That is an average of $40,000 per child or $8,000 per year per child. If 375,000 cocaine exposed infants are born each year nationally, in five years the increased pre-school costs alone could reach $15 billion per year (i.e., $1 billion for every 25,000 drug-exposed infants). Whether or not the school systems provide this additional assistance has a large bearing on the overall costs. It is certain that the preschoolers who require assistance and do not receive it will present even bigger problems to the schools later on. Those costs will take the form of more spending on programs for the learning disabled and higher drop-out rates (the subject of a later chapter).

The price tag does not end there. The Department of Education estimates that the additional costs for these learning-disabled students will range from $1,643 to $3,083 per year. With 375,000 entering the system per year, the annual cost of this program could be as much as $7.4 billion to $13.9 billion per year by the end of the 1990s (i.e., $0.6 billion per 25,000 drug-exposed infants, using costs of $2,000 per student). This figure does not adjust for a higher-than-average drop out rate for these students which will likely increase without the special programs.

Cathy Trost ("As Drug Babies Grow Older, Schools Strive to Meet Their Needs." *Wall Street Journal*, 1989) reports that the Los Angeles Unified School District spends $18,000 per year on each drug-damaged child—$14,000 more than the cost of a student in a regular classroom. Spending at this level would represent an additional $63 billion educational bill by the end of the decade. Thus, the total cost of these drug-exposed children—including ICU charges, pre-school expenditures, and the added costs during twelve years of formal education—could run as high as $88 billion per year ($33 billion using more conservative DOE estimates of additional schooling requirements).

The Center for Disease Control estimates that 32 percent of the new AIDS cases reported in 1989 were either intravenous drug users or individuals who had heterosexual contact with an intravenous drug user. While heterosexual contact with an intravenous drug user is the chief means of the spread of AIDS into the heterosexual community, over the past two years barely 2,000 of the newly reported cases have been contracted in this manner (Schiffman. "Total AIDS Cases Rose 9% in 1989, According to U.S." *Wall Street Journal*, 9 February 1990).

Micro-level simulations reported by Plumley ("AIDS: Is the Prognosis Really So Dire?" *Contingencies*, 1990) estimate that by the year 2000 there will have been over 1.3 million cases of AIDS in the United States, with over 1.1 million deaths. Plumley admits that if the intravenous drug-using population is 50 percent larger than assumed in his model, the number of new AIDS cases will be one-third larger by the end of the decade.

The estimated lifetime medical costs of treating an AIDS patient may run as high as $80,000. With one-third of the new cases contracted resulting either directly or indirectly from intravenous drug use, this source is currently responsible for adding about $1 billion to the nation's health care bill. In addition, Bloom and Carliner ("The Economic Impact of AIDS in the United States." *Science*, 1988) report that the average AIDS patient can expect $623,000 in forgone income due to lost productivity and premature death[21] If one-third of the 1.3 million AIDS cases expected by the year 2000 are attributed to intravenous drug use, the forgone earnings could run as high as $270 billion for this group. Using prevalence estimates from the Center for Disease Control, Scitovsky and Rice[22] estimate the economic cost of AIDS to be $66.5 billion in 1991. Attributing one-third of the cases to IV drug use, puts a $22 billion price tag for that segment of the affected group in 1991 ($6.5 billion in 1988). Since over one-half of the intravenous drug users test positive for the HIV virus, this problem is just beginning to exert an impact upon our economic system.

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[21] It is likely that the intravenous drug using segment of the AIDS population is not as productive on average as the homosexual segment. To the extent that this is true, the foregone income of the typical intravenous drug user will not be as high.

[22] "Estimates of the Direct and Indirect Costs of Acquired Immunodeficiency Syndrome in the United States, 1985, 1986, and 1991." *Public Health Reports* 102, 1987

Labor Market Costs

By far the largest cost component for substance abuse relates to reduced productivity and lost employment. Harwood, et al.,[23] report that drug-abusing employees are 28 percent less productive than non-abusers. They are three times more likely to be injured on the job and are absent more frequently. Constituting five percent of the work force, drug abusers cost the economy $28 billion in 1980 ($33 billion in 1983) in reduced productivity and lost employment alone. This figure represents about one percent of gross national product (GNP). In today's $5.5 trillion economy, the economic consequences of reduced productivity and lost employment due to drug abuse may be as high as $55 billion ($48.7 billion in 1988).

Rice, et al.,[24] came up with significantly lower estimates for employment costs, $8.5 billion in 1985 with 1988 updates raising that figure to $10.2 billion. The major differences between this study and the RTI study are due to the use of different prevalence rates and different impairment rates. The age-sex cohort prevalence rates used in the UCSF study (ranging from 0.4 percent for 55-64 year old females to 8.6 percent for 18-24 year old males) translate into a 3.8 percent overall prevalence rate for the entire labor force (compared with the 5.0 percent figure used by RTI). A more significant difference, however, lay in the impairment rates utilized. The age-sex cohort impairment rates used in UCSF (ranging from 0.6 percent for 18-24 year old females to 18.0 percent for 35-54 year old females) provide an average productivity loss of around 4.0 percent (compared with the 28.0 percent figure used by RTI).

Two other studies estimate the employment costs to be much higher. A U.S. Chamber of Commerce study by de Bernardo[25] presents a startling profile of the drug-using employee. The typical "recreational" user in the work force is more likely to request time off, to be absent eight or more days per year, to be late for work, to be injured on or off the job, to file a worker's compensation claim, and to have wages garnished. This drug abuser is one-third less productive than the non-user, costing the U.S. economy $60 billion in lost productivity.

A survey of chief executive officers of the Fortune 1,000 companies, state governors, and the mayors of the 65 largest cities in the U.S.[26] revealed that substance abuse in the work place exacts costs on employers ranging between one percent and five percent of payroll annually. Based on these results, Kingman estimates that substance abuse costs the economy between $60 billion and $65 billion annually in lost productivity alone.

Law Enforcement Issues

The allure of illegal drugs to their producers and sellers--especially cocaine and crack--is not difficult to understand when the financial aspects are identified. The supply of cocaine reaching U.S. markets increased from 40-48 metric tons in 1980 to 350-400 metric tons in 1988. Over the same time period, the average street purity of the substance increased from 12 percent to 60 percent or higher[27]. The increased supply has driven down the wholesale price, but increased risks to the street dealer and growth in demand have kept retail prices up. The wholesale price of cocaine was around $55,000 per kilo in 1980, as compared with $18,000 per kilo in 1988[28]. The 1988 street price was around $200 per gram or $200,000 per kilo (somewhat less for crack, around $135,000 per kilo). Thus, the retail market for cocaine alone may be as much as $80 billion per year. To put this into perspective, this means that annual U.S. spending on cocaine is greater than spending on oil and its derivative products.

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[23] *Economic Costs to Society of Alcohol and Drug Abuse and Mental Illness: 1980*. Research Triangle Park, N.C., 1984

[24] *The Economic Costs of Alcohol and Drug Abuse and Mental Illness: 1985*. San Francisco, CA, 1990

[25] *Drug Abuse in the Workplace: An Employer's Guide to Prevention*, 2nd ed., 1988

[26] Kingman. *Substance Abuse in the Workforce*. New York, 1988

The Drug-Crime Connection Drug abuse violations reached 850,000 in 1988, as compared with 162,000 in 1968. That amounts to 450 drug arrests per 100,000 population, up from 112 twenty years earlier[29]. In addition to this connection, drugs and crime are linked in several other important ways[30]. First, drug abusers commit crimes such as robbery and burglary to support their costly habit. Second, the abuse of drugs, especially stimulants such as cocaine, can sometimes trigger violent behavior by reducing normal inhibitions and provoking assaultive behavior. Third, drug users commit more crime than nonusers possibly because of their frequent contact with the criminal subculture.

Recent data from the National Institute of Justice[31] indicate that drug abuse among criminals is extremely high. Applying the NIJ Drug Use Forecasting System to 1988 arrest data gathered through the Uniform Crime Reporting system suggests that on average 47 percent of arrestees tested positive for cocaine use (59% using a weighted average). Larger metropolitan areas such as Los Angeles, Miami, New York, Philadelphia, and Washington, D.C., have rates above 60 percent. Previous studies indicate that the criminal activity of drug abusers is extremely high. Ball, et al.,[32] examined the criminal behavior of 243 opiate addicts in Baltimore and found that since their first opiate use, the typical addict committed over 2,000 crimes per year (other than illegal use or possession of drugs).

Costs Associated with Drug Crimes. The direct costs of drug-related crime at the local level can be categorized as follows: *(1)* the cost of employing law enforcement officers whose time is spent exclusively in drug enforcement, *(2)* the proportion of the district attorney's efforts spent to prosecute drug cases, *(3)* the share of the criminal court system's time devoted to trying drug cases, and *(4)* the cost of incarceration of those convicted of drug-related crimes.

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[27] Gorriti. "How to Fight a Drug War." *The Atlantic Monthly*, 1989

[28] Kraar. "The Drug Trade." *Fortune*, 1988

[29] Wish. "U.S. Drug Policy in the 1990s: Insights from New Data from Arrestees." *International Journal of the Addictions*, forthcoming

[30] Goldstein. "Drugs and Violent Crime." *Pathways to Criminal Violence*. Beverly Hills, Ca., 1989

[31] U.S. Congress. Senate. Committee on the Judiciary. "Hard-core Cocaine Addicts: Measuring—and Fighting—the Epidemic." 1990

[32] "The Day-to-Day Criminality of Heroin Addicts in Baltimore: A Study in the Continuity of Offense Rates." *Drug and Alcohol Dependence* 12, 1983

State and federal courts are clogged with drug-related cases. In 1986, 23 percent of the 583,000 felony convictions in state courts were drug offenders. Approximately 18 percent of the 20,102 federal court trials in 1988 were drug cases (about 3,300 in all). Current legislation is expected to increase drug case filings by 20-50 percent over these levels by 1992[33]. With 1.15 million drug arrests in 1989, the legal battle against drugs is threatening our ability to administer these cases effectively within the framework of the current system[34]

The average cost to maintain a prisoner in one of our state prisons in 1988 was $16,000 per year. An estimated 10 percent of the Texas prison population of 550,000 are incarcerated for violation of drug laws, costing in 1986 a minimum $2 billion[35]. The cost of maintaining a prisoner at a federal facility was about $14,500. Approximately one-third of the 50,000 federal inmates were drug violators. Estimates from the U.S. Sentencing Commission predict that in 15 years, one-half of a 100,000 to 150,000 federal prison population will be there as a result of drug law violations.

The RTI study cited earlier[36] estimates the cost of crime at $26.5 billion in 1983, including law enforcement efforts, premature mortality, and treatment costs. RTI estimates were made assuming that ten percent of violent crime is drug related. The UCSF study, using similar methodology, estimates crime costs at $32.5 billion in 1985 (with 1988 updates increasing the estimate to $42.4 billion).

Deschenes, Anglin, and Speckart[37] estimate that the increased criminal activity associated with narcotics abuse costs society $20,000 per year per addict. While there is no evidence that cocaine addicts are typical in this aspect of their behavior, there is no firm reason to believe that they are any different. If cocaine addicts are typical in this regard, the increased criminal activity of the 2.2 million addicts will cost society $44 billion per year.

Summary

Recent estimates place the number of cocaine addicts at 2.2 million, over one percent of the adult population. With limited biomedical knowledge about the

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[33] Beale. "Get Drug Cases Out of the Federal Courts." *Wall Street Journal*, 1990

[34] It should be emphasized that the numbers cited include only those tried on drug charges. Those individuals on trial for violent crimes such as burglary, robbery, and murder that are drug-related are not included.

[35] Nadelmann. "Drug Prohibition in the United States: Costs, Consequences, and Alternatives." *Science*, 1989

[36] Harwood, et al., *Economic Costs to Society of Alcohol and Drug Abuse and Mental Illness: 1980.* Research Triangle Park, N.C., 1984

[37] *Narcotics Addiction: Related Criminal Careers, Social and Economic Costs.* Los Angeles, CA, 1988

Summary Estimates of the Economic Costs of Drug Abuse, 1988
Various Sources (in billions of dollars)

Category	High Estimate	Low Estimate
Health care costs		
Medical costs to business	$ 15.2 (1)	$ 2.7 (6)
ICU costs of drug-exposed infants	10.5 (2)	2.8 (7)
Total cost of AIDS	6.5 (3)	2.3 (8)
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Total health care costs	$ 32.2	$ 7.8
Work force costs		
Reduced productivity and employment loss	48.7 (4)	10.2 (9)
Law enforcement costs		
Crime (including lost productivity for the incarcerated)	44.0 (5)	42.4 (10)
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Total economic costs of drug abuse	$124.9	$ 60.4

Sources:
(1) Total health care expenditures from Arnett, et al. (1987), prevalence rates from Harwood, et al. (1984), and relative costs of drug abusing employees compared with non-abusers from deBernardo (1988).
(2) ICU costs from Chasnoff, et al. (1989) assuming 375,000 drug-exposed infants born annually.
(3) Extrapolated from data presented in Scitovsky and Rice (1987).
(4) Estimated using one percent of 1988 GNP (Harwood, et al., 1984).
(5) From estimates of crime costs of narcotics addicts provided in Deschenes, Anglin, and Speckart (1988), assuming 2.2 million cocaine addicts.
(6) Direct medical treatment costs from Rice, et al. (1990).
(7) ICU costs from Chasnoff, et al. (1989) assuming 100,000 drug-exposed infants born annually.
(8) Direct and indirect medical costs of treating AIDS patients from Rice, et al. (1990).
(9) Reduced productivity and employment loss from Rice, et al. (1990).
(10) Total crime costs from Rice, et al. (1990).

addictive nature of the substance, the long-term impact on this segment of the population is unclear. However, the extensive cost of drug use and abuse to society is clearly evident to those who are willing to examine the evidence.

Direct medical spending on drug detoxification and rehabilitation, estimated at between $2.7 billion and $15.2 billion annually, is a relatively small portion of the costs to society. The two emerging areas of medical costs that have not yet completely impacted on the economy are those costs associated with cocaine-exposed infants and those accompanying the spread of AIDS into the intravenous drug-using community. The direct medical costs for infants exposed in utero is between $2.7 billion and $10.5 billion for intensive care unit charges alone. If the annual number of drug-exposed infants remains at current levels, the extra costs of preschool education and special learning-disabled programs for these children is likely to be between $6.4 billion and $24.0 billion annually by the year 2000 (figures not included in the cost estimates presented in the table above).

The intravenous drug-using population adds another $2.3 to $6.5 billion to annual costs as a result of their exposure to AIDS. Total health care costs to the U.S. economy are estimated to be between $7.8 and $32.2 billion in 1988.

The second major component of drug abuse cost is the reduced productivity and lost employment that results. Estimates place the dollar value of the 1988 economic loss at between $10.2 and $48.7 billion .

Over $80 billion is spent annually on cocaine and crack at the street level. In this high mark-up market it is no surprise that law enforcement costs are staggering. Arrest data from 1988 indicate that 47 percent of the arrestees tested positive for cocaine use, which may indicate that many of the non-drug crimes are actually drug-related. Crime costs were estimated at between $42.4 and $44.0 billion in 1988.

Thus, based on the research surveyed, total economic costs of drug abuse in the U.S. was between $60.4 billion and $124.9 billion in 1988.

In Lieu of Recommendations

One must be extremely careful in making policy recommendations on a subject as sensitive and important as drug abuse. The magnitude of the economic costs alone is enough to generate interest in the topic. The danger is that we are tempted to conclude that society should should commit more resources to fighting the problem simply because it is so costly. From an economic perspective, Jody L. Sindelar[38] appropriately observes that policy should be founded, not on the magnitude of the economic costs, but rather on the resources saved be additional spending.

The first step in dealing with the drug problem is to establish realistic national goals. We must rid ourselves of the notion of the "perfectibility of human nature," and accept the fact that a drug-free America is not possible. First of all, we are not willing to spend the resources necessary to accomplish this (and even if we were, it would not be cost effective to do so). Secondly, the measures required to totally eliminate drugs are too oppressive to fit within our national concept of civil liberties.

At the other extreme, a great deal of attention has been focused on a competing alternative, namely, legalize and tax. Granted, such a strategy would lower the crime rate by removing an entire genre of criminal acts from the legal code[39], but the reality is that people who commit crimes to support their drug habits will not become model citizens and productive employees if the possession and use of drugs is legalized.

"Cost of illness" studies (such as the current survey) do not provide a sound economic basis for policy recommendations. Good policy is based on the insights of marginal analysis. For our purposes, this means a careful study of the cost effectiveness of alternative means of reducing drug use and abuse, whether they be interdiction, education, or treatment.

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[38] "Economic Cost of Drug Studies: Critique and Research Agenda." 1990

[39] U.S. House of Representatives, *Legalization of Illicit Drugs: Impact and Feasibility* 1989

One thing is certain. This problem is not just a law enforcement problem, it is not just a public health crisis, and it is not just an addiction crisis. It is a complex combination of all three, complicated by the problems of the urban decay of our cities and the moral decay of our society. If economics is to contribute to the public policy discussion, we must begin to focus on the appropriate questions; i.e., analyzing which programs will result in the most effective use of scarce national resources. Cost of illness studies are useful in focusing our attention on the sheer magnitude of the problem. But to answer the complicated questions of optimal allocation of resources will require careful analysis of the effectiveness of individual programs in lowering costs and improving the quality of the lives affected by this national plague.

CHAPTER TWO

POLICIES WHICH HAVE SUCCESSFULLY MOVED ADDICTS AWAY FROM CRACK

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Executive Summary

Beginning with an appraisal of the magnitude of the reported epidemic increase in the abuse of the form of cocaine known as "crack," this chapter reviews evidence for the relationship between crack abuse and criminal behavior. Concluding that the evidence supports the necessity to control the abuse of crack, a review of current drug control policy is made in order to ascertain which policies successfully reduce crack abuse and addiction.

Law enforcement policy has led to programs of crop eradication, interdiction and seizure of drug shipments, arrests of traffickers and dealers, and drug testing of various citizen groups. The success of any or all of these programs is questionable, given the growth in the supply and availability of drugs today.

Treatment policy has changed over the years as the scientific community has increasingly entertained the theory that drug addiction, especially addiction to non-opiates, may be partly psychological. Rigorously controlled research to evaluate the success of treatment programs is almost non-existent, with most programs able to produce a few successes to justify further funding.

Education/prevention policy offers the greatest potential to deter initial drug use and has greatly expanded in the past ten years. Scientific research suggests programs that provide positive peer group pressure against drug use are the most successful, especially if they offer the precocious and rebellious teenager positive peer pressure and positive adult role models who do not use drugs.

While none of the policies reviewed in this chapter have uniformly and reliably moved addicts away from crack, current programs and practices generated by these policies offer some potential for success.

Definitions

Crack is a form of cocaine that can be smoked, providing the abuser a rapid rate of infusion. Since the appearance of crack is of recent origin, the available academic literature is of modest size. The discussion that follows is based on recent studies on crack as well as the more voluminous literature on cocaine.

Policy in this paper is defined as that procedure, course of action, or principle followed by government or some other legitimate institution designed to achieve an effect or outcome on the abuse of drugs.

Introduction

The Problem of Crack Addiction

The recent epidemic increase in the use of the "crack" form of cocaine has created a public outcry for new policies and programs to deal with such drug abuse. Former national drug policy director William J. Bennett[40] announced that the principal focus of the Bush administration's anti-drug program would be crack cocaine "because the drug poses the clearest, most immediate danger to the largest number of people, [and] . . . is the most dangerous and quickly addictive drug known to man" (1989:3). Before crack appeared, cocaine was the drug of the rich. It is usually inhaled and costs users up to $200 a gram. Since crack cocaine is less expensive ($5 - $10 a rock), has a strong reinforcing effect, and does not involve possible nose damage from snorting or risk of disease from injection, it has quickly been adopted as the drug of choice[41]. Crack is believed to be more addictive than other forms of cocaine because of its rapid rate of infusion[42].

Accurate estimates of the extent of the crack problem are difficult to evaluate. Older studies indicated that at least 12 million Americans use cocaine once a year, with four to six million using it monthly[43]. More recently, the National Institute on Drug Abuse[44] in its 1988 household survey estimates the number of hard-core abusers of all forms of cocaine at about 850,000. Other research which shows that this estimate is too low has been released by the Senate Judiciary Committee[45]. Citing the failure of previous studies to include prisoners, those in treatment facilities, and the homeless, the Senate committee estimates there are 2.2 million hard-core abusers, or about one in 100 of the U. S. population. Hard-core cocaine abuser rates vary from 40 addicts per 1,000 in New York City to 1.1 per 1,000 in South Dakota. The average for the nation is about 10 per 1,000, with the states of New York, California, and Texas accounting for 41 percent of the nation's addicts. The states included in this regional report (Arizona, California, New Mexico, and Texas) account for almost 25 percent of the nation's hard-core cocaine abusers according to the Senate Judiciary report. Estimates of those who have ever used cocaine (including crack) are 10 in 100, with 1.4 in 100 having used crack at least once[46].

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[40] Office of National Drug Control Policy,. *National Drug Control Strategy 1*, 1989; *National Drug Control Strategy 2*, 1990

[41] Oetting. "Crack: The Epidemic." *The School Counselor*, 1988

[42] Balster. "Pharmacological Effects of Cocaine Relevant to its Abuse." Washington, D.C., 1988

[43] Polich, et al. *Strategies for Controlling Adolescent Drug Use*. Santa Monica, CA., 1984

[44] *National Survey of Drug Abuse: Main Findings, 1988*. Washington, D.C., 1989

While an annual survey by the University of Michigan[47] reports that illegal drug experimentation among high school seniors has declined somewhat over the past two years, the use of cocaine did not show any major decline. Lloyd Johnston[48] reports that the problem of crack may be worse than indicated, since the survey does not include crack users who did not attend school regularly or who had already dropped out of school. Johnston estimates that "one in every six or seven high school seniors nationwide has tried cocaine and about one in 18 has tried crack cocaine specifically" [49]. The Drug Abuse Warning Network (DAWN) reports that drug–related hospital emergencies have decreased somewhat for cocaine users. Thirty-two percent of all drug–related emergencies in 1987 were due to cocaine; in 1989, the percentage of emergencies attributable to cocaine had dropped to 28 percent[50]. While accurate estimates of the growth in the number of crack users continues to be researched, estimates cited previously show that crack is a significant social problem that warrants special national consideration.

The reported association between the abuse of crack and violent crime has brought this social problem to the forefront of public outcry and debate. The incidence of violent activity and homicide is reported to be higher among cocaine traffickers than among traffickers in other types of drugs[51]. Current drug tests on arrestees in New York City show that some seventy-four percent test positive for cocaine[52]. In a random sample of 458 abusers who telephoned the 800-COCAINE national hotline in May 1986, 78 percent reported irritability, 65 percent reported paranoia, 18 percent reported suicide attempts, and 31 percent reported violent behavior[53]. Other research reports that 42 percent of crack abusers deal in drugs to support their habit, 35 percent engage in other illegal activities to pay for drugs, and 20 percent have been arrested for crimes related to the use of cocaine[54]. Ruffener, et al.[55] estimate that 30 percent of all property crime is due to drug abuse and the abuser's need for money. Baridon[56] estimates that 25 to 50 percent of property crime is committed by drug addicts. Results from the *Special Report from the State Prison Inmate Survey, 1986* [57] show an increase in state prison inmates who report they were under the influence of drugs when apprehended. Eighty percent of inmates indicated they used drugs at some time in their life, with 50 percent reporting their drug abuse began by age 15. The *Survey* also reported that 18.6 percent of inmates were daily abusers of drugs before arrest and incarceration and were convicted of crimes for gain, such as burglary or robbery. Drug-related homicides and felony drug convictions account for the single, largest- and fastest-growing sector of the federal prison population[58]. The recent increase in the abuse of crack cocaine and the reported connection between drug abuse and criminal activity necessitates the development of new social policy to deal with this national tragedy.

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[45] Committee on the Judiciary. "Hard-core Cocaine Addicts: Measuring--and Fighting--the Epidemic." 101st Congress, 2nd sess., 1990

[46] National Institute on Drug Abuse. *National Household Survey on Drug Abuse: 1988 Population Estimates.* Washington, D. C., 1989

[47] National Institute on Drug Abuse. *National Survey of Drug Abuse: Main Findings, 1988.* Washington, D.C., 1989

[48] "Crack Use: No Decline." *New York Times*, 1990.

[49] New York Times, 1990. 14 February

[50] *New York Times*, 1990

[51] Caffrey. "Counter-Attack on Cocaine Trafficking: The Strategy of Drug Law Enforcement." *Bulletin of Narcotics* 36, 1984

[52] U.S. Congress. Senate. Committee on the Judiciary. "Hard-core Cocaine Addicts: Measuring—and Fighting—the Epidemic." 1990

[53] Washton and Gold. "Recent Trends in Cocaine Abuse: A View from the National Hotline, '800-COCAINE'." *Advances in Alcohol and Substance Abuse*, 1986

Conceptual Framework Behind Prevention Policies

The traditional conceptual framework that has guided drug prevention policy since the 1920s has been that of "supply" and "demand." The early history of drug control is marked by supply side programs. Beginning with the Harrison Act in 1914 until the Narcotics Control Act of 1956, drug abuse was considered a law enforcement problem[59]. Reducing the supply, it was believed, would "automatically" reduce demand. The federal government has followed a policy of control of the supply of illegal drugs by enforcing penalties for the manufacture, sale, or possession of designated controlled substances. Yet, as more money has been spent for law enforcement, the quantity and availability of drugs has also increased. The efficacy of supply side policies has been questioned by several authors[60]. Beginning in the 1960s, a variety of new drug prevention efforts focused on reducing the demand for drugs emerged[61]. Over the years, those engaged in programs on the supply side, for example, have increasingly found themselves having to compete with programs on the demand side for limited federal and state program dollars. The framework of supply and demand is blamed for creating the current hard-line division of efforts into law enforcement efforts, on the supply side; and treatment and education efforts, on the demand side. This division is now viewed as artificial and counter productive for the variety of approaches needed to effectively deal with the complexities of the drug problem[62].

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[54] Brower and Anglin. "Adolescent Cocaine Use: Epidemiology, Risk Factors, and Prevention." *Journal of Drug Education* 17, 1987

[55] *Abuse Management Effectiveness Measures for NIDA Drug Abuse Treatment Programs.* Vol. 2. *Costs of Drugs to Society.* Research Triangle Park, N.C., 1976

[56] *Addiction, Crime, and Social Policy.* Lexington, MA., 1975

[57] Bureau of Justice Statistics. "Drug Use and Crime." Washington, D.C., 1988.

[58] Office of National Drug Control Policy. *National Drugs Control Strategy I.* Washington, D.C., 1989

[59] Schroeder. *The Politics of Drugs: Marijuana to Mainlining.* Washington, D.C., 1975

[60] isotsky. *Breaking the Impasse in the War on Drugs.* New York, 1986; Lapham. "The War on Drugs is Hypocritical." *Drug Abuse: Opposing Viewpoints.* , St. Paul, MN., 1988; Reuter. "US Efforts to Stop Drug Trafficking Have Failed." *Drug Abuse: Opposing Viewpoints.* St. Paul, MN., 1988

[61] Wisotsky. *Breaking the Impasse in the War on Drugs.* New York, 1986

> The new Household Survey changes our picture of the drug problem a bit, making it more precise and comprehensible. But it does not change the lesson that must be learned from our many years of experience in the fight. That lesson is clear and simple: no single tactic—pursued alone or to the detriment of other possible and valuable initiatives—can work to contain or reduce drug use. No single tactic can justly claim credit for recent reductions in most use of most drugs by most Americans. And no single tactic will now get us out of our appalling, deepening crisis of cocaine addiction. [63]

Current efforts to reduce and control drug abuse have a threefold approach. Law enforcement efforts are aimed at controlling drug abuse by enforcement of state and national drug laws. Treatment programs are aimed at the reduction of drug dependencies of those who have become addicted. Education and prevention programs are aimed at prevention of initial drug use. Our review of current policies and scientific studies of programs which have successfully moved addicts away from crack will proceed according to the following three policies: *(1)* law enforcement policies; *(2)* treatment policies; and *(3)* education and prevention policies.

Criteria for Success: A Minimal Definition

The Drug Control Strategy Report (1990) states, "Cocaine addiction is especially difficult to treat: currently there are no proven successful treatment strategies comparable to those for heroin addicts" [64]. Some critics suggest that such a treatment does not exist because over eighty percent of cocaine users do not become addicted[65]. Besides a lack of consensus on how addictive cocaine is, there is also disagreement whether the drug's effects are primarily psychological or physiological[66]. The answers to these questions await further research. Part of the difficulty in defining success in prevention or treatment programs involves the reasons individuals are motivated to use drugs. Anglin and Hser[67] conclude that a large variety of biological, socio-cultural, economic, and psychological factors play an interdependent role in this complex of behavior. One-dimensional treatment programs or prevention efforts may have an intervention approach inappropriate to the abuser's motivational modality. A National Institute on Drug Abuse Research Monograph[68] identifies several categories of theories to explain the motivation for drug taking. These categories separate theories into those based on the abuser's relationship to others; the abuser's relationship to society; the abuser's relationship to nature; and the abuser's relationship to self. The 50 researchers who were invited to write articles for this monograph held 43 different theoretical perspectives. This apparent but not uncommon lack of basic agreement about drug abuse motivation, as well as questions about the addictive and physiological effects of cocaine make it difficult to assess which policies and programs are successful.

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[62] Office of National Drug Control Policy. *National Drug Control Strategy 2.* Washington, D.C., 1990

[63] Office of National Drug Control Policy. *National Drug Control Strategy 2.* Washington, D.C., 1990

[64] Office of National Drug Control Policy, 1989:37

[65] Wisotsky. *Breaking the Impasse in the War on Drugs.* New York, 1986

[66] Polich, et. al. *Strategies for Controlling Adolescent Drug Use.* Santa Monica, CA., 1984; Gawin and Ellinwood. "Cocaine Dependence." *Annual Review of Medicine* 40, 1989

[67] "Treatment of Drug Abuse." *Drugs and Crime.* Edited by Tonry and Wilson. Chicago, IL., 1990

Since many programs have not been evaluated, the criteria for success have not even been established. Apsler and Wayne[69] conclude that drug abuse treatment and prevention studies have employed the least consistent and adequate methodologies of evaluation. Some would require a successful program of prevention or treatment to reduce the prevalence of cocaine abuse[70]. Others[71] would define successful prevention and treatment as a reduction in the general and/or specific incidence of drug use. Other factors to be included in a definition of success are whether the treatment effect is for one drug or multiple drugs; the durability, feasibility, and adaptability of the effect; and whether the effect is consistent across different populations. Duration of the treatment constitutes an additional consideration. There are long waiting lists and delays of entry time into public treatment programs. In addition, the duration of treatment is often limited by medical insurance, and addicts are sometimes forced out of programs before the treatment has produced any significant change.

The criteria for success used in this chapter is that of a "minimal definition" which may necessitate the use of a "single-case" experimental design in evaluating program success[72]. This criteria identifies treatment responsiveness and differential treatment effects at the analytical level of the individual. Any and all policies and programs which have successfully helped prevent or reduce drug abuse for at-risk individuals are included for consideration in this review. Obviously, a top priority for future efforts to control and reduce drug abuse is research that would evaluate the success rates of such attempts. And by using the "single-case" strategy, it will be important to have a large variety of small sample-studies in this research agenda.

Law Enforcement Policies

Current efforts by law enforcement agencies include the eradication of drug crops grown in other countries; the interdiction of drugs shipped into the U. S. from other countries; efforts to disrupt the distribution of drugs at the regional and national levels; and arrest of drug traffickers, sellers, and buyers at the local retail level. The rationale behind the approach of law enforcement is to reduce the supply of illegal drugs by making it more risky and difficult for traffickers to distribute drugs, thereby causing the price of drugs to increase, which in turn is supposed to reduce consumption.

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[68] *Theories on Drug Abuse*. Series no. 30. Rockville, Md., 1980

[69] *Cost-Effectiveness Analysis of Drug Abuse Treatment: Current Status and Recommendations for Future Research.* Paper presented at the National Institute on Drug Abuse's Annual Advisory Committee Meeting, 1990

[70] Schultz. "U.S. Efforts to Stop Drug Trafficking Have Been Successful." *Drug Abuse: Opposing Viewpoints*. Edited by Bach. St. Paul, MN., 1988

[71] Botvin. "Defining 'Success' in Drug Abuse Prevention." *Problems of Drug Dependence 1988*. National Institute of Drug Abuse Research Monograph Series 88. Washington, D. C., 1988

[72] Barlow and Herson. *Single-Case Experimental Designs: Strategies for Studying Behavior Change*. New York, 1985

Law enforcement efforts are extremely difficult to evaluate and will not be considered in this section. Valid, non-politicized academic research in this area is difficult to find. Wisotsky[73] questions the efficacy of attempts at crop eradication. He argues that proposed U.S. crop eradication plans do not adequately take into account Colombian farmers' reliance upon cocaine as a cash crop. A recent announcement by the Office of National Drug Control Policy stated that 50 percent of the coffee growers in Bolivia have turned to growing cocaine because of economic considerations. Interdiction and drug seizure efforts have also been criticized and questioned[74]. Not only is there little evidence to show that such efforts are related to drug prices, but also the long-term supply of drugs does not appear to be affected by even the largest seizures. The argument can be presented that the increased risk of being caught may drive the price of drugs up modestly, but that higher prices and the promise of larger profits itself stimulates greater risk taking and trafficker security measures. One of the most vexing problems facing increased law enforcement efforts is dealer and trafficker adaptability. Each level of escalation in the effort to interdict drug shipments leads to an escalation of methods and technologies of smuggling. A Rand Corporation study concludes that "intensified law enforcement is not likely to make large inroads against drug abuse. Existing strategies cannot eliminate or even tightly constrain the production of drugs" [75]. Brecher's[76] assessment of law enforcement strategy concludes that drug abuse has not been significantly reduced by law enforcement efforts.

> Law enforcement has sought to reduce drug abuse by arresting users, pushers, and persons high up in drug trafficking networks. It has sought to interdict drugs at U. S. borders and curb the production of illegal drugs abroad. Although some of the efforts have apparently been temporarily effective, adjustments by drug networks soon bring the supply back to previous levels. Attempts to address the drug problem through laws and law enforcement have failed.

The Legalization Argument

If law enforcement does not significantly reduce the supply of drugs, the consideration of legalization comes to mind. Ernest van den Haag and John LeMoult[77] compare the attempt to prohibit drug use today with the attempt to prohibit the use of alcohol in the 1920s: "Taking drugs does not necessarily addict you. . . . addiction is self-limiting. A certain portion of the population becomes addicted; most people do not." While agreeing that legalization would make current drugs easier and cheaper to buy, van den Haag argues there would not be a significant rise in drug addiction, only a significant reduction in the amount of crime. Witsotsky[78] argues that the production and distribution of cocaine is so lucrative a cash crop that it is beyond effective governmental control: "Law enforcement procedures and pressure inevitably creates (sic) lucrative entrepreneurial opportunities in the black market. The federal drug enforcement system ignores the laws of supply and demand."

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[73] *Breaking the Impasse in the War on Drugs.* New York, 1986

[74] Polich, et al. *Strategies for Controlling Adolescent Drug Use.* Santa Monica, CA., 1984

[75] Polich, et al. *Strategies for Controlling Adolescent Drug Use.* Santa Monica, CA., 1984

[76] "Drug Laws and Drug Law Enforcement: A Review and Assessment Based on 111 Years of Experience." *Drugs and Society* 1, 1986

[77] "Legalize Illegal Drugs." *Drug Abuse: Opposing Viewpoints.* Edited by Bach. St. Paul, MN., 1988

Charles B. Rangel, on the other hand, compares legalization to an act of capitulation in the war on drugs[79]. He suggests that legalization would increase the population that might use drugs and become addicted. The arguments for or against legalization tend to operate in a vacuum of empirical research. Legalization might lead to an increase in abuse. For this reason, legalization is rejected as a policy alternative at the present time. The Office of National Drug Control Policy[80] suggests that law enforcement efforts have only marginally deterred illegal drug abuse. However, marginal deterrence may just be part of the balance of forces that have held illegal drug abuse to its current level.

Drug Testing

Another issue related to deterring drug abuse is whether there should be mandatory drug testing in certain key occupations and industries. Some authors believe that drug testing is the most valid and reliable way to ascertain drug abuse[81]. Data from the National Institute of Justice's Drug Use Forecasting System (DUF) uses drug testing of arrestees to determine drug use. The percentage of arrestees who test positive for cocaine ranges between Omaha, Nebraska's 23 percent to New York City's 74 percent[82]. The average for positive cocaine tests for all cities is 47 percent. Since these results indicate a higher level of cocaine use than in some national surveys, selected drug testing in the work place may offer a potential for deterrence. Some authors, however, point out the results of such tests are unreliable[83]. For example, one of the most widely used tests for cocaine has a false positive rate which occasionally reaches 43 percent[84]. Large scale drug testing could result in many falsely identified positive users, as standards for large test quantities may not improve. Other objections to drug testing concern the possible violation of individual rights, including privacy[85]. The debate over mandatory drug testing continues, with limited testing now a part of certain team sports, law enforcement, the military, and other occupations.

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[78] "Exposing the War on Cocaine: The Futility and Destructiveness of Prohibition." *Wisconsin Law Review* 6, 1983

[79] "Do Not Legalize Illegal Drugs." *Drug Abuse: Opposing Viewpoints.* Edited by Bach. St. Paul, MN., 1988

[80] *National Drug Control Strategy I.* Washington, D.C., 1989

[81] Grabowski and Lasagna. "Drug Testing is Reliable." *Drug Abuse: Opposing Viewpoints.* Edited by Bach. St. Paul, MN., 1988; Berger. *Drug Testing.* New York, 1987

[82] U.S. Congress. Senate. Committee on the Judiciary. "Hard-core Cocaine Addicts: Measuring—and Fighting—the Epidemic." 1990

[83] Panner and Christakis. "Drug Testing is Unreliable." *Drug Abuse: Opposing Viewpoints.* Edited by Bach. St. Paul, MN., 1988

[84] Panner and Christakis. "Drug Testing is Unreliable." *Drug Abuse: Opposing Viewpoints.* Edited by Bach. St. Paul, MN., 1988

Treatment Policies

Type of Addiction Created by Cocaine

Current literature does not offer conclusive evidence about how addictive cocaine is or whether addiction is primarily psychological or physiological. Cocaine is classified as a stimulant and produces effects different from those produced by opiates[86]. Wisotsky maintains[87] that millions of Americans use cocaine with little or no long term damage or addiction. If, as is reported, only ten to twenty percent of cocaine users become addicted, there must be psychological as well as physiological factors that govern addiction. Khantzian and McKenna[88] find physical dependence on cocaine much lower than dependence on opiates; while other sources contradict this finding and argue that the effects of cocaine are primarily physiological[89]. George and Goldberg[90] suggest that genetic differences may exist which influence the rewards or pleasurable effects from the use of cocaine. As NIDA suggests in its preface, "Although progress is being made . . . a full understanding of the compulsion to keep using cocaine is, as yet, not available." [91]. If cocaine addiction is primarily physiological, then chemical treatment programs offer the greatest potential for success. If cocaine addiction is primarily psychological, then group and individual therapy programs offer the greatest potential for success. An important consideration in this regard is the recognition that differing categories of abusers may benefit from differing types of treatment. The match of treatment modality to client type is an important part of today's strategy. McLellan and Associates[92] conducted several studies which attempt to match and evaluate clients according to psychopathology and treatment modality. Matched clients had significantly better treatment outcomes than non-matched clients. McLachlan[93] reports that the "cognitive style" of the addict also significantly affects treatment progress. Additional variables to consider in matching individuals to treatment modalities include self-esteem[94], marital status[95], and employment status[96]. Thus, all current treatment programs may be considered appropriate for different sectors of the population. Of course, the questions of which of the above factors is most salient, and whether these factors vary in importance between individuals remains open.

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[85] *The New Republic*, "Drug Testing Violates Workers' Rights." *Drug Abuse: Opposing Viewpoints*. Edited by Bach. St. Paul, MN., 1988.

[86] Jaffe. "Drug Addiction and Drug Abuse." *The Pharmacological Basis of Therapeutics*. 6th ed. Edited by Gilman, Goodman, and Gilman. New York, 1980

[87] *Breaking the Impasse in the War on Drugs*. New York, 1986

[88] "Acute Toxic and Withdrawal Reactions Associated with Drug Use and Abuse." *Annals of International Medicine* 90, 1979

[89] Dunwiddie. "Mechanism of Cocaine Abuse and Toxicity: An Overview." National Institute of Drug Abuse Monograph Series 88. Washington, D.C., 1988

[90] "Genetic Differences in Responses to Cocaine." National Institute of Drug Abuse Monograph Series 88. Washington, D.C., 1988

[91] Clovet, Asghar, and Brown. "Foreword." National Institute of Drug Abuse Monograph Series 88. Washington, D.C., 1988

[92] "Matching Substance Abuse Patients To Appropriate Treatment: A Conceptual and Methodological Approach." *Drug/Alcohol Dependency* 5, 1985

Detoxification Programs

Detoxification programs are based on biological theories of drug abuse which view dependency as primarily physiological. Detoxification programs constituted the most common treatment modality in past years. As a result of increased federal funding, research has recently been conducted on the pharmacological effects of cocaine[97]. But the search for an effective pharmacological "blocker" which negates the pleasurable effects of cocaine continues. This blocker would aid detoxified addicts against relapse.

While many communities have yet to acquire a detox program, the effectiveness of such efforts is increasingly being questioned[98]. Detoxification units have only the short-term goal of ending an addiction and are not structured to prevent relapses. They have had little success in reducing long term heroin addiction and appear entirely inappropriate for a non-opiate addiction such as cocaine[99].

Residential and Therapeutic Communities

Residential and therapeutic community programs were developed in the early 1960s in reaction to the biologically-based detoxification programs in place at the time. Therapeutic communities are residential treatment centers where individuals live as residents in a structured environment designed to resocialize certain interpersonal deficiencies. Most programs began as treatment centers for heroin addicts, with the unique feature that the staff members who operate these tightly regulated centers were former addicts who came through the same type of program. Success rates for these programs are difficult to evaluate as many do not consider statistics and record keeping of any importance. Successful treatments are described in terms of ethnographic, personal success stories. Some therapeutic communities no longer adhere to the rigorous group therapy model of the past and now use a variety of individual and group therapies and interventions[100]. The Pacific Institute for Clinical Training suggests that the best residential treatment model for cocaine dependence is one in which the drug-free therapeutic community is viewed as a launching platform for the recovery process, instead of the actual experience in which the patient undergoes major transformations[101]. Other treatment modalities are needed to supplement the recovery process launched at residential centers. Carol Price of the Hospital Corporation of America's Hill Country Hospital in San Antonio, Texas, states that the major focus of professionals in the mental health field has shifted to what can be done to prevent behavioral manifestations instead of treating entrenched addictive behaviors[102]. She views the residential community as necessary for only hard to treat addicts; others are best served in outpatient programs.

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[93] "Therapy Strategies, Personality Orientation and Recovery From Alcoholism." *Journal of the Canadian Psychiatric Association* 19, 1974

[94] Annis and Chan. "The Differential Treatment Model: Empirical Evidence From a Personality Typology of Adult Offenders." *Criminal Justice and Behavior* 10, 1983

[95] Azrin, et. al. "Alcoholism Treatment by Disulfiram and Community Reinforcement Therapy." *Journal of Behavioral Therapeutic Experimental Psychiatry* 13, 1982

[96] Levinson. "Controlled Drinking in the Alcoholic: A Search for Common Features." *Alcoholism and Drug Dependence.* Edited by Madden, Walker, and Kenyon. New York, 1977

[97] Mendelson and Mello. "Clinical Investigations of Drug Effects in Women." National Institute on Drug Abuse Research Monograph Series 65. Rockville, Md., 1986; Extein, Gross, and Gold. "The Treatment of Cocaine Addicts: Bromocriptine or Desipramine." *Psychiatric Annals* 18, 1988; Wolverton and Kleven. "Multiple Dopamine Receptors and the Behavioral Effects of Cocaine." NIDA Research Monograph Series 88. Washington, D.C., 1988; Gawin, Allen, and Humblestone. "Outpatient Treatment of 'Crack' Cocaine Smoking with Flupenthixol Decanoate: A Preliminary Report." *Archives of General Psychiatry* 46, 1989

[98] Brill. *The Clinical Treatment of Substance Abusers.* New York, 1981

[99] Brill. *The Clinical Treatment of Substance Abusers.* New York, 1981

Individual and Group Therapy Programs

Eighty-five percent of persons treated for drug abuse today are in outpatient programs which use some form of psychotherapy or group therapy[103]. Most of these programs are non-institutional and non-residential. Kleber and Slobetz[104] suggest nearly all treatment of non-opiate drug abusers occurs in such programs. "Although abstinence is essential . . . an effective treatment program for cocaine addiction must incorporate education and counselling" [105]. A great variety of therapeutic interventions have been developed in these outpatient programs, including social network therapy[106]; the 12-step concept of Alcoholics Anonymous[107]; day care centers[108]; hypnotherapy[109]; assertiveness training[110]; and aversive and reinforcement type behavior therapies[111]. Frank

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[100] Einstein. "Understanding Drug User Treatment Evaluation: Some Unresolved Issues." *International Journal of Addictions* 16, 1981

[101] Zweben. "Treating Cocaine Dependence: New Challenges for the Therapeutic Community." *Journal of Psychoactive Drugs* 18, 1986

[102] Price. Personal communication to Glen E. Lich, 1990

[103] Office of National Drug Control Policy. *National Drug Control Strategy I.* Washington, D.C., 1989

[104] "Outpatient Drug Free Treatment." *Handbook on Drug Abuse.* Edited by DuPont, et al. Rockville, Md., 1979

[105] Washton. "Preventing Relapse to Cocaine: Cocaine Abuse and Its Treatment." *Journal of Clinical Psychiatry* 49, 1988

[106] Galanter. "Social Network Theory for Cocaine Dependence." *Advances in Alcohol and Substance Abuse* 6, 1986

[107] Ehrlich and McGeehan. "Cocaine Recovery Support Groups and the Language of Recovery." *Journal of Psychoactive Drugs* 17, 1985

[108] Feigelman, Merton, and Amann. "Day-care Treatment for Youth Multiple Drug Abuse: A Six Year Follow-up Study." *Journal of Psychoactive Drugs* 20, 1988

[109] Sells. "Matching Clients to Treatments: Problems, Preliminary Results and Remaining Tasks." *Matching Patient Needs and Treatment Methods in Alcoholism and Drug Abuse.* Edited by Gottheil, McLellan, and Druley. Springfield, IL., 1981

[110] Williams, Hadden, and Marcavage. "Experimental Study of Assertion Training as a Drug Prevention Strategy for use with College Students." *Journal of College Student Personnel* 24, 1983

[111] Polich, et al. *Strategies for Controlling Adolescent Drug Use.* Santa Monica, CA., 1984

Hylton at the Needles Counseling Center in Needles, California, writes that drug abusers need to come to grips with low self-esteem and anger, that drug abuse is only the symptom of an underlying problem[112].

There appears to be little consensus about the effectiveness or success of cocaine (including crack) treatment programs. The Office of National Drug Control Policy from the Executive Office (1989) is optimistic in stating, "treatment for drug addiction can—and often does—work" (1989:36). The less severe the addiction and the longer an individual remains in treatment, the greater the chance for treatment success. About half of those who remain a year or longer in a residential treatment program have stayed off cocaine for over seven years[113]. Other studies supporting the correlation between length of stay in any type of treatment program and successful outcomes include Coombs[114]; Holland[115]; and DeLeon, Wexler, and Jainchill[116]. Evidence has also been reported to show that the average crack addict must experience two or three treatment cycles to achieve long-term progress in defeating the addiction[117].

The Office of National Drug Control Policy[118] suggests that cocaine addiction is more difficult to treat today since addicts often have other health problems and usually have a history of multiple drug abuse. Another problem involves the lack of available capacity for treatment in publicly funded programs in high-abuse areas. Consequently, many non-opiate cocaine addicts can find treatment only in opiate-heroin treatment programs. The most vexing problem concerns whether drug treatment procedures should be on a voluntary basis or can be equally appropriate on an involuntary basis. Most of the successful treatment results are from studies conducted on voluntary patients. On the other hand, court-appointed clients present special problems with regard to treatment and the results are sometimes unsuccessful[119]. In an involuntary treatment program, the therapeutic relationship between a therapist and patient is suspect[120]. This view is shared by Petersen[121] who concludes that compulsory treatment of addicts in prison, on parole, on probation, or in halfway-house settings is not successful.

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[112] Personal communication to Glen E. Lich, 1990

[113] National Institute on Drug Abuse. "An Evaluation of the Teen Challenge Treatment Program." Services Research Report No. ADM 81-245. Rockville, Md., 1977

[114] "Back on the Streets: Therapeutic Communities' Impact Upon Drug Users." *American Journal of Drug and Alcohol Abuse* 8, 1981

[115] *Evaluating Community-Based Treatment Programs: A Model for Strengthening Inferences About Effectiveness.* Chicago, 1981

[116] "The Therapeutic Community: Success and Improvement Rates 5 Years After Treatment." *International Journal of Addictions* 17, 1982

[117] Seligmann, et. al. "Cocaine." *Newsweek*, 1986; Anglin and Hser. *Treatment of Drug Abuse.* Chicago, 1990

[118] *National Drug Control Strategy 1.* Washington, D.C., 1989

[119] Schottenfeld. "Involuntary Treatment of Substance Abuse Disorders—Impediments to Success." *Psychiatry* 52, 1989

[120] Newman. "We'll Make Them an Offer They Can't Refuse." *Criminal Justice and Drugs: The Unresolved Connection.* Edited by Weissman and DuPont. Port Washington, N.Y., 1982

[121] "Some Reflections on Compulsory Treatment of Addiction." *Drugs and the Criminal Justice System.* Edited by Inciardi and Chambers. Beverly Hills, 1974

The majority of treatment in the U. S. is voluntary, initiated by the addict. Plans to increase involuntary treatment earlier have met with criticism of First Amendment rights[122]. The California Civil Addict Program[123] attempts to increase the number of addicts in treatment programs through civil commitment procedures. Clients receive close monitoring upon leaving the program, including frequent urine testing with the potential for incarceration if testing shows subsequent drug use. More recently, Anglin and Hser.[124] have evaluated the outcomes of such programs, finding their results favorable and promising. Of course, programs of this type of civil commitment would require substantial increases in levels of treatment funding.

Education and Prevention Policies

Whereas treatment programs try to reduce or eliminate drug use among those who are impaired or addicted, education/prevention programs try to prevent drug use before it begins or before it becomes habitual or addictive. Because of this focus, many education/prevention programs target adolescents and younger age categories. While a corporation's decision for regular employee urinalysis can be considered a preventive program, most prevention efforts consist of educational and peer pressure programs aimed at those not yet using and/or those who have just begun to experiment with drugs. Some believe that educational programs offer the most potential for successful drug prevention strategy. Schools are the key site for such preventive programs, since young people are viewed as the "population-at-risk" [125]. Middle and elementary school student surveys indicate that the pressure to use illegal drugs begins around the fourth grade[126], with alcohol the "gateway" drug. Alcohol and tobacco have been suggested as possible "gateway" drugs since their abuse at an early age greatly increases the likelihood of progression to illegal drugs later in adolescence[127]. Between the fourth and sixth grades, the number of young persons experimenting with alcohol increases from six percent to seventeen percent, with nearly two percent of sixth graders already reporting experimentation with marijuana[128]. The school is an appropriate location for introducing programs to prevent drug abuse. The California State Department of Education has recently undertaken a comprehensive survey of the increase in drug and alcohol programs which resulted from Drug-Free Schools funding[129]. Other school systems have also begun to take an active role in program development and evaluation. Some districts have established departments of services to at-risk students and special committees of parents and educators to work on drug and related problems. In this regard, see the Arlington Independent School District in Arlington, Texas[130], and the East Central Independent School District in San Antonio, Texas[131]. Programs designed to educate and prevent drug use began with information models, added models based on individual deficiency, and most recently have developed models which take peer pressure and social environment into account.

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[122] Schur. *Crimes Without Victims*. Englewood Cliffs, N.J., 1965; Szasz. "The Right to Drugs—A Matter of Freedom?" *Long Island Newsday*, 1970; Weil. *The Natural Mind: A New Way of Looking at Drugs and the Higher Consciousness*. Boston, 1970

[123] National Office of Drug Control Policy. *National Drug Control Strategy 1*. Washington, D.C., 1989

[124] "Treatment of Drug Abuse." *Drugs and Crime*. Edited by Tonry and Wilson. Chicago, IL., 1990

[125] Brotman and Suffet. "The Concept of Prevention and Its Limitation." *Criminal Justice and Drugs: The Unresolved Connection*. Edited by Weissman and DuPont. Port Washington, N.Y., 1982

[126] Funkhouser and Amatetti. "Alcohol and Drug Abuse Prevention: From Knowledge to Action." *Task Force on Alcohol and Drug Abuse*. Washington, D.C., 1987

[127] U. S. Department of Education. *Drug Prevention Curriculum: A Guide to Selection and Implementation*. Rockville, Md., 1988

[128] National Parents' Resource Institute for Drug Education. *Drug Usage Prevalence Questionnaire: 1986-87*. Atlanta, 1988; U. S. Department of Education. *Drug Prevention Curriculum: A Guide to Selection and Implementation*. Rockville, Md., 1988

[129] Honig. Personal communication to Glen E. Lich, 1990

Information Programs

A key effort of prevention rests in informational, educational programs and curricula which use persuasion to reduce demand for drugs[132]. These approaches assume that given valid information about the effects of drug abuse, most young people will avoid harming themselves through drug abuse[133]. An early example of this type of curricular information is *Teaching About Drugs: A Curriculum Guide, K-12,* published jointly by the American School Health Association and the Pharmaceutical Manufacturer's Association[134]. This curriculum was used at one time in schools in Seattle, Cleveland, and Los Angeles. Forty states currently mandate education about substance abuse, and 32 have issued minimum standards for substance abuse curricula[135].

Critics of information and curriculum programs suggest that such information given in school may be rejected by young persons if it is presented by police, clergy, or counselors instead of regular teachers[136]. Even when the information is presented accurately and by a regular classroom teacher, such programs may stimulate an interest in drugs instead of deter interest[137]. To guard against such "boomerang" effects of early drug information programs, the Department of Education counsels school districts to reject any materials which advocate "the responsible use of drugs," and those which use open-ended decision making and offer non-judgmental attitudes to behavior. Schools are also warned to avoid the use of former addicts or pushers as speakers in prevention educational settings[138]. In addition, this federal report highly recommends that information-only curricula should be supplemented by materials that teach values and appropriate action at each educational level. Of course, these recommendations and suggestions are not universally accepted.

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[130] Sommerville. Personal communication to Glen E. Lich, 1990

[131] Berg. Personal communication to Glen E. Lich, 1990

[132] Brotman and Suffet. "The Concept of Prevention and Its Limitation." *Criminal Justice and Drugs: The Unresolved Connection.* Edited by Weissman and DuPont. Port Washington, N.Y., 1982

[133] Goodstadt. "Myths and Methodology in Drug Education: A Critical Review of the Research Evidence." *Research on Methods and Programs of Drug Education.* Edited by Goodstadt. Toronto, 1978

[134] Kent, Oh., 1970

[135] Chaney and Farris. "Prevention Activities of State Education Agencies." *Report to Congress and the White House, 1987.* Washington, D.C., 1987

[136] Brotman and Suffet. "The Concept of Prevention and Its Limitation." *Criminal Justice and Drugs: The Unresolved Connection.* Edited by Weissman and DuPont. Port Washington, N.Y., 1982

[137] Stuart. "Teaching Facts About Drugs: Pushing or Preventing?" *Journal of Educational Psychology* 66, 1974; Blum, Blum, and Garfield. *Drug Education: Results and Recommendations.* Lexington, MA., 1976

[138] U. S. Department of Education. *Drug Prevention Curriculum: A Guide to Selection and Implementation.* Rockville, Md., 1988

A variety of films and videocassettes are also available to complement curricula. "Crack," a 15–minute videocassette[139], alerts viewers to the dangers of dealer–prepared "freebase" ; includes an interview with cocaine expert Arnold Washton, who explains why crack is five to ten times more dangerous than regular cocaine; and contains interviews with six former teenage addicts who are now in treatment.

Since the specific content and amount of time devoted to instruction is left up to school districts, the results of instruction may vary extensively from one district to another. The most widely cited effort to monitor, test, and evaluate a prevention program is the Midwestern Prevention Project (Project STAR) in Kansas City[140]. Students participating in the drug prevention training program reduced marijuana use by five percent for a 30–day period compared with students not in the program. Other studies confirm that information programs appear to increase young persons' knowledge about drugs, but only occasionally lead to attitudes against drug abuse[141]. Polich[142] suggests three reasons for the weak effects of drug information programs: *(1)* the assumption that information will guide behavior may be wrong; *(2)* the model is built on the questionable causal sequence that attitude change leads to behavior change; and *(3)* adolescents tend to be present-oriented and less likely to consider future possibilities in making decisions about behavior. To date, much of the effort to prevent drug abuse among students has relied on the information model, which does not appear to be as effective as newer prevention models.

Individual Deficiency Programs

The individual deficiency model is based on the assumption that young people take drugs to compensate for lack of social skills or poor self-esteem. Programs based on this model attempt to enhance student self-esteem and improve student skills in decision making. Values clarification programs come under this category. Carney reviews several programs in schools in California and Arizona[143], one of which emphasizes the clarification of non-drug behavior and the risks involved with drug taking. Other programs are designed to counteract students' negative social attitudes and low self-esteem[144]. Students engage in mutual problem solving, group discussions, and a series of exercises designed to develop self-awareness and self-appreciation. This type of program is observed in the Ingram Independent School District's "Student Assistance Program" [145]. The program serves as a referral agency for students who manifest signs of "depression, sudden mood swings, inappropriate anger and defensiveness." Students identified in this program are interviewed to determine amount of guilt, low or negative self-esteem, low family support, and lack of bonding. The student's family is then contacted to confirm self-esteem problems within the home and an attempt is made to interest parents in the support group program[146]. Student and family participation and progress are monitored, with suggestions to teachers about potential reinforcement behavior.

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[139] Sunburst Communicators. Pleasantville, N.Y., 1986

[140] Office of National Drug Control Policy,. *National Drug Control Strategy 2*, 1990

[141] Kinder, Pape, and Walfish. "Drug and Alcohol Education Programs: A Review of Outcome Studies." *International Journal of Addictions* 7, 1980

[142] *Strategies for Controlling Adolescent Drug Use.* Santa Monica, CA., 1984

[143] "An Evaluation of the Effect of Values-Oriented Drug Abuse Education Program Using the Risk Taking Attitude Questionnaire." Coronado, CA., 1971; "An Evaluation of the Tempe, Arizona, 1970-71 Drug Abuse Prevention Education Program Using the RTAQ and B-V1: Final Report." Tempe, AZ., 1972

[144] Kim. "An Evaluation of Ombudsman Primary Prevention on Student Drug Abuse." *International Journal of Addictions* 11, 1981; "Feeder Area Approach: An Impact Evaluation of a Prevention Project on Student Drug Abuse." *International Journal of Addictions* 17, 1982

While there are a variety of programs attempting to provide remedies for individual deficiency, there is little research that indicates such programs are effective in reducing drug abuse. Most academic research that has focused on individual personality characteristics of drug abusers[147] has found either no relation or only weak relations between drug abuse and the personality factors of alienation, loss of control, and self-concept. Personality factors that do appear significantly related to drug abuse among adolescents include low valuation of academic achievement[148]; low religiosity[149]; higher need for independence[150]; and higher rebelliousness[151]. Not only are drug-using adolescents more rebellious to traditional norms and authority, they are also assessed as wanting to appear more adultlike and independent. Wingard, Huba, and Bentler[152] suggest this factor may show that drug-using adolescents are influenced more by the values and practices of their peers[153].

Social Pressure Programs

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[145] Moffett. Personal communication to Glen E. Lich, 1990

[146] Moffett. Personal communication to Glen E. Lich, 1990

[147] Gersick, et al. "Personality and Socio-demographic Factors in Adolescent Drug Use." *Drug Use and the American Adolescent: Research Monograph 38. Rockville, Md.,*, 1981; Kandel. "Convergences in Prospective Longitudinal Surveys of Drug Use in Normal Populations." *Longitudinal Research on Drug Use: Empirical Findings and Methodological Issues.* Edited by Kandel. Washington, D.C., 1978; O'Malley. "Correlates and Consequences of Illicit Drug Use." Ph.D. dissertation. Ann Arbor, 1975

[148] Jessor and Jessor. "Theory Testing in Longitudinal Research on Marijuana Use." *Longitudinal Research on Drug Use: Empirical Findings and Methodological Issues.* Edited by Kandel. Washington, D.C., 1978

[149] Jessor, Chase, and Donovan. "Psychosocial Correlates of Marijuana Use and Problem Drinking in a National Sample of Adolescents." *American Journal of Public Health* 70, 1980

[150] O'Malley. "Correlates and Consequences of Illicit Drug Use." Ph.D. dissertation. Ann Arbor, 1975

[151] Smith. "Antecedents of Teenage Drug Use." Presented at the Eastern Psychological Association meeting, Washington, D.C., May 1973; Kandel, Kessler and Margulies. "Antecedents of Adolescent Initiation into Stages of Drug Use." *Longitudinal Research on Drug Use: Empirical Findings and Methodological Issues.* Edited by Kandel. Washington, D.C., 1978; Smith and Fogg. "Psychological Predictors of Early Use, Late Use, and Non-Use of Marijuana Among Teenage Students." *Longitudinal Research on Drug Use: Empirical Findings and Methodological Issues.* Edited by Kandel. Washington, D.C., 1978

[152] "The Relationship of Personality Structure to Patterns of Adolescent Substance Use." *Multivariate Behavioral Research* 14, 1979

[153] See also, Newcomb, Maddahian and Bentler. "Risk Factors for Drug Use Among Adolescents: Concurrent and Longitudinal Analysis." *Unpublished paper.* Department of Psychology, UCLA, 1985

Perhaps the most replicated research finding of the past few years of adolescent drug research is the influence exercised by a student's peers and peer group. While parental norms and values exert some influence, the peer group appears to have the strongest effect on student drug behavior[154]. As Polich, et. al. summarize this research, "primary prevention programs . . . should put greater emphasis on social influences" [155]. Peer pressure begins at an early age. The responses of 100,000 fourth graders to a 1987 *Weekly Reader* survey were analyzed to determine the extent to which peer pressure influences student behavior[156]. Twenty-four percent of fourth graders reported feeling peer pressure to try cocaine or crack and 34 percent reported pressure to try wine coolers.

The most recent variety of programs to prevent adolescent drug use attempt to control drug use through the utilization of social pressure. Social pressures programs use the readiness of adolescents to copy the behavior of role models that appear mature and sophisticated. One such program of this type is the "Just Say No" clubs[157]. This nationwide association provides positive peer reinforcement to adolescents to not abuse drugs through workshops, seminars, walkathons, and newsletters. Clubs are organized by schools, communities, or parent groups. A 30–minute video, "Crack Street, USA: First-Person Experiences With a New Killer Drug" is available from Guidance Associates[158] and is designed to teach adolescents *why* to say no, *how* to say no, and *when* to help their peers say no. Interviews with drug counselors, juveniles struggling with addiction, and police officers are included.

Another example of this type of program is one called H_2O (Help To Others), currently in operation in the Ingram Independent School District in Ingram, Texas[159]. The major goals of the program are to create a caring and supportive environment for the student body, develop helping skills in peer helpers, and hold bi-monthly rap meetings. Formal training for this program has included peer pressure reversal training; training in communication, listening and stress management skills; and core team training including a workshop on building relationships[160]. Sharon Scott's Peer Pressure Reversal[161] is included in training for both adult contacts and peer leaders. Resnick and Gibbs[162] describe the Teen Involvement For Drug Abuse Prevention program in Maricopa County, Arizona. Support material for peer counseling groups is available from five regional agencies, for example, the Southwest Regional Center for Drug Free Schools and Communities

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[154] Kandel, et. al. "Adolescent Involvement in Legal and Illegal Drug Use: A Multiple Classification Analysis." *Social Forces* 55, 1978; Elliot, Huizinga, and Ageton. *Explaining Delinquency and Drug Use.* Beverly Hills, CA., 1985; Green. "Examination of the Relationship Between Crime and Substance Use in a Drug/Alcohol Treatment Population." *International Journal of Addictions* 16, 1981; Mensch and Kandel. "Dropping Out of High School and Drug Involvement." *Sociology of Education* 61, 1988

[155] *Strategies for Controlling Adolescent Drug Use.* 1984

[156] Makovsky and Company. *Children Report Less Peer Pressure to Try Marijuana; New Pressure to Try Crack.* Middletown, CN., 1987

[157] Just Say No Foundation. Newsletter. Walnut Creek, CA., 1988

[158] Mount Kisco, N.Y., 1987

[159] Moffett. Personal communication to Glen E. Lich, 1990

[160] Moffett. Personal communication to Glen E. Lich, 1990

[161] Amherst, MA., 1985

[162] "Types of Peer Program Approaches." *Adolescent Peer Pressure.* Washington, D.C., 1981

(1989), funded by federal and state money and founded by the U. S. Department of Education. Material for parents and parent groups is available from the National Parents' Resource Institute for Drug Education[163]; also known as "PRIDE" a national resource center which provides consultant information to parent groups and school personnel; and from TARGET, which has a computerized referral service to other prevention programs and is sponsored by the National Federation of State High School Associations (1989). The growth of parental support groups is described in two 1982 Congressional reports[164]. These groups provide support for peer group anti-drug pressure, drug-free events, curfews, parent skill training, and the formation of parent action groups to work with school and community agencies to insure a more coordinated approach to drug prevention.

Positive results for programs are often reported by school agencies, but few of these programs have been rigorously evaluated. The Executive Director of the Behavioral Health Agency of Central Arizona reports that one area school has significantly reduced its dropout rate and drug use rate by the use of programs to identify high risk youth, parent training groups, peer support groups, tutoring, mentoring programs, and alternative schools[165]. While few of these programs have been evaluated for their success in reducing drug abuse, there have been several studies that have evaluated the use of peer pressure and adult role models to reduce teenage smoking[166]. Polich, et al.,[167] suggest this approach is transferrable, therefore offering the best potential for success among all the education/prevention models.

Summary

Social values are generally accepted as structuring social behavior. One of the values that characterizes American society is the use of pharmaceutical preparations to fight disease, relieve pain, and bring about more pleasant mental and physical conditions. For example, those who smoke cigarettes and use alcohol regularly report they continue to use these substances because of their pleasurable effects. Americans take drugs of various types to reduce pain, enhance pleasure, and generally assist in the search for the "good life."

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[163] *Drug Usage Prevalence Questionnaire: 1986-87*. Atlanta, 1988

[164] Senate. "Statement of the Senior Policy Adviser for Drug Policy, Office of Policy Development." Hearing before the Subcommittee on Alcoholism and Drug Abuse: Oversight on Prevention Activities of the National Institute on Alcohol Abuse and Alcoholism and the National Institute on Drug Abuse; Committee on the Judiciary: Juveniles and Dangerous Drugs. Hearing before the Subcommittee on Juvenile Justice, "Statement of the Deputy Director, National Institute on Drug Abuse."

[165] De Anda. Personal communication to Glen E. Lich, 1990

[166] Botvin and Eng. "A Comprehensive School-Based Smoking Prevention Program." *Journal of School Health* 50, 1980; McAlister, et al. "Pilot Study of Smoking, Alcohol, and Drug Abuse Prevention." *American Journal of Public Health* 70, 1980; Luepker, et al. "Prevention of Cigarette Smoking: Three Year Follow-Up of an Education Program for Youth." *Journal of Behavioral Medicine* 6, 1983; Flay, et al. "Cigarette Smoking: Why Young People Do It and Ways of Preventing It." *Pediatric Behavioral Medicine*. Edited by Firestone and McGrath. New York, 1983

[167] *Strategies for Controlling Adolescent Drug Use*. Santa Monica, CA., 1984

In one sense, those who use illegal drugs are no different than other members of society. They have been socialized into the dominant cultural value pattern and seek the same goals as everyone else. In another sense they are significantly different, since they appear to exercise little or no restraint in crossing the boundary of legality. The recent rise in the abuse of crack cocaine has dramatically increased the number of babies born with addiction[168] and has also been connected with increased violent crime and drug turf wars. Public outcry about this problem has prompted a search for effective ways to prevent and control such drug abuse. National surveys have estimated hard-core abusers of cocaine (all forms) to number about one in 100, with occasional users numbering somewhere between four to six per 100 persons. The prevalence of cocaine abuse is of sufficient magnitude to warrant national concern. This bibliographic investigation of successful policies which have moved addicts away from the abuse of crack has identified three major policies in current efforts to control drug abuse: law enforcement policy, treatment policy, and education/prevention policy.

Recommendations

1. Assuming that policy designed to influence demand is as important as policy designed to influence supply, federal budget expenditures should be evenly balanced between such supply and demand policies. Law enforcement efforts and education/prevention/treatment efforts should be balanced (for instance, law enforcement–50%; education/prevention–30%; treatment–20%).

2. Drug testing should be encouraged in the private sector. Such testing should work to deter abuse and help enhance law enforcement efforts.

3. Outpatient treatment programs need to be expanded by additional funding to reduce waiting list delays for addicts. Research on physiological and psychological effects of crack should continue, enabling researchers to identify the best treatment modalities for differing individuals.

4. The peer pressure/social pressures programs should be expanded and should be given rigorous evaluation to determine which of these efforts most successfully prevent drug abuse.

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[168] Bentsen. Statement before the Senate Finance Committee, 28 June 1990

CHAPTER THREE

REDUCING THE HIGH-SCHOOL DROPOUT RATES: CONCERNS , PROGRAMS AND RECOMMENDATIONS

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Executive Summary

Each year a substantial number of students leave school before graduating. These students, usually labeled as "dropouts," impact all areas of our society—school, community, business, and home. A major hindrance to understanding the problem of dropouts has been the difficulty of identifying probable dropouts and determining dropout rates. The generally accepted definition of a dropout is a young person who is not enrolled in school and/or has not completed at least twelve years of schooling. The best predictors of who drops out of school are poor academic performance and social adjustment. In fact, Benjamin Bloom in his book, *Stability and Change in Human Characteristics*[169] states that patterns of behavior in elementary school are good predictors of patterns in later grades.

More than one million students in the U. S. dropped out of school in 1988, yielding a 28.5 percent non-graduation rate. The non-graduation rate is a great cost—in both economic and human terms. In Texas alone, each class of dropouts costs over $17.12 billion in (a) foregone income and lost tax revenues and (b) increased costs in welfare, crime and incarceration, unemployment insurance and placement, and adult training and education (for each cohort of dropouts). Every dollar invested in educating potential dropouts is estimated to result in a return of nine dollars.[170] The human costs cannot be measured in such concrete terms.

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[169] New York, 1964

[170] *Texas School Dropout Survey*, Texas Department of Community Affairs, Dec. 1986

So many students are leaving schools that federal, state, and local governments and philanthropic foundations have established programs to reduce the dropout rate. Different types of programs—reactive, preventive/proactive, and remedial—have been founded in middle schools, high schools, alternative schools, and youth centers across the nation with varying degrees of success and cost. No one model works for all dropouts. However, at least two model programs—the Philadelphia High School Academics Program and the School Development Program—are finding ways to reduce dropout rates in their particular cities.

Definitions

One attempt to identify general terminology for students who leave school before graduating is found in Aaron Pallas' "School Dropouts in the United States." [171] To clarify terms associated with dropouts, the author states that in general, a student can be either a *dropout* or a *stayin.* A *stayin* has continuous school enrollment through high school graduation, whereas a *dropout* is someone whose progress toward a high school diploma has been interrupted by a period of nonenrollment in school. *Dropouts* can be further classified as either *stayouts* or *returnees. Stayouts* never return to school, while *returnees* come back to school at least once. Further, there are also two types of *returnees—dropins* are *returnees* who come and go and never receive a diploma; *completers* are *returnees* who return and eventually earn a diploma or its equivalent. Pallas' report gives national data concerning white returnees. He states that those white returnees with higher test scores prior to dropping out and those from families with a higher socioeconomic status are more likely to return and complete their education[172]. However, it is unclear where these returnees complete their education. The *Texas School Dropout Survey*[173] uses five other definitions to categorize dropouts. The general term *early school leavers* is synonymous with *dropouts.* The other terms are: *(1) pushouts*—students who are removed from school as undesirables; *(2) disaffiliates*—students who no longer wish to be affiliated with school; *(3) educational mortalities*—students who fail to complete a program; *(4) capable dropouts*—students whose family socialization disagrees with school demand; and *(5) stopouts*—students who drop out and re-enroll.

Terminology associated with students who are potential dropouts is also needed. The terms *marginal student* or *at-risk student* are currently used but do not refer to any set of characteristics based on intelligence or social class. Instead, these definitions include a broad range of adolescents, some bright and others less so, who find themselves unsuccessful, unhappy, and even unwelcome in school[174]. Since research does not report clear definitions for dropouts, the terminology reported above will not necessarily be reflected in the studies and model programs reported in the remainder of this report.

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[171] *The Condition of Education.* Edited by Stern and Williams. Washington, D.C., 1986

[172] "School Dropouts in the United States." *The Condition of Education.* Edited by Stern and Williams. Washington, D.C., 1986; National Center for Educational Statistics (NCES). "High School Dropouts: Descriptive Information from High School and Beyond." *Bulletin.*, 1983

[173] Texas Department of Community Affairs. Austin, 1986

[174] Wehlage. "Effective Programs for the Marginal High School Student." *Phi Delta Kappa Fastback* 197, 1985

Introduction

We have not realized the American ideal of a free public education for all. Our nation is clearly "at risk" when large numbers of students leave school before taking advantage of the opportunities school offers[175]. Within the past few decades, strategies have been implemented to reduce the number of students who leave school before graduating. However, for true educational reform to be effective these strategies must be coupled with equal concern for motivating students to stay in school. Such programs should aim to keep students in school because they like to be there, they see its usefulness, and they experience some form of success and achievement.

Understanding the Dropout

As a result of the various definitions of dropouts and data collection methods, many myths about dropout students exist. Compilation of a dropout profile is possible, but each profile must be interpreted in light of the population from which it was constructed. Recognition of school and community influences and awareness of the reasons students give for dropping out are, of course, instrumental in designing programs to meet the needs of dropouts and to provide necessary programs for at-risk students. However, simply knowing the reasons for school, community, and family related problems will not solve the problems.

Dropouts and At-Risk Students

Because of the differences in definitions and data collection procedures, researchers must be cautious in interpreting findings and making generalizations. At-risk students who later become dropouts share a number of characteristics. Students from low socioeconomic backgrounds have the highest dropout rate; among racial groups, Hispanics have the highest rate, followed by blacks, then whites. Low socioeconomic status and minority group status are strong predictors of dropping out. Other demographic traits with a high dropout rate include students from single-parent, large, urban, or Southern families[176].

Research has lead to other dropout predictors. First, the at-risk or marginal student is typically in the bottom 25 percent of the class as measured by grade point average[177]. Second, such students have frequently failed courses and are behind in acquiring the credits needed to graduate. Finally, some lack basic skills needed to succeed in school, and their attitude and conduct is considered problematic by teachers and administrators.

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[175] Grossnickle,"High School Dropouts: Causes, Consequences, and Cure." *Phi Delta Kappa Fastback* 242 1987

[176] Wehlage, Rutter, and Turnbaugh. "A Program Model for At-Risk High School Students." *Educational Leadership* 44, 1987

[177] Wehlage. "Effective Programs for the Marginal High School Student." *Phi Delta Kappa Fastback* 197, 1985

Frequent offenses committed by these students are refusal to do academic work, smoking in school, coming to school under the influence of drugs or alcohol, and truancy. Substance abuse seems to have shifted. In a recent issue of *Newsweek*, Grace Slick reports four statistics about the patterns alcohol, marijuana, cocaine, and crack abuse among today's youth. In a 1989 poll of seniors, 60 percent said they had drunk alcohol in the past 30 days; in 1980, 72 percent said they had. Seventeen percent of the 1989 seniors said they had smoked marijuana in the past 30 days; 37 percent of the 1979 seniors said they had. Between 1986 and 1989, the number of seniors using cocaine decreased from 6.2 percent to 2.8 percent. However, daily crack use among inner-city youth is still heavy, but the overall use by high school students has fallen slightly since 1987[178]. Truancy remains the most significant problem because it is likely to lead to failure of courses, which in turn makes graduation difficult and even unlikely. Therefore, students who are rebellious or delinquent drop out of school at higher rates than those who are not.

Reasons Given for Dropping Out

Students drop out of school for a variety of reasons related to both in-school and out-of-school experiences. Nevertheless, poor academic performance, in addition to truancy and negative attitudes toward school, is probably the best predictor of dropping out. The November 1983 National Center for Educational Statistics' (NCES) *Bulletin*, entitled "High School Dropouts: Descriptive Information from High School and Beyond", reports data from a longitudinal study begun in 1980. In this study primary reasons given for dropping out among males were poor grades (36%), dislike of school or feeling out of place there (35%), employment (27%), inability to get along with teachers (21%), and expulsion or suspension (13%). For females, the four most frequently cited reasons were marriage or plans to marry (31%), dislike of school or feeling out of place there (31%), poor grades (30%), and pregnancy (23%).

Dropout Statistics and Rates

Recently, President Bush set a goal of graduating ninety percent of American high school students by the year 2000. Currently, according to a 1987 United States Department of Education study of high school seniors, Minnesota is the only state that graduates more than ninety percent of its high school students; six other states (Iowa, Montana, Nebraska, North Dakota, Wisconsin, and Wyoming) graduate slightly more than eighty-five percent of their students.

A recent report commissioned by the American Medical Association and the National Association of State Boards of Education highlights a dilemma related to the dropout issue. These two groups appointed a consortium of leaders from education, medicine, politics, religion, and community services to prepare a report entitled *Code Blue: Uniting for a Healthier Youth*[179]. One of the findings from this report states that "for the first time in the history of this country, young people are less healthy and less prepared to take their places in society than were their parents." It reported that every community has a significant number of young people with serious social and emotional problems. The consequences range from high suicide-attempt rates to poor school performance and high dropout rates. The report urges schools to play a stronger role in young people's lives and the nation to recognize that adolescents will not achieve their potential if they have social, emotional, and physical problems that interfere with their learning. If the nation and its schools continue to ignore the social, emotional, and physical problems of young people, the levels of learning and preparedness will continue to decline. *Workforce 2000*, a report on labor market trends by the Hudson Institute in Indianapolis, estimates that in the 1990s demand for skilled workers will increase, but the labor market itself will grow at only one-third the rate of the 1970s. It further states that if such trends as high dropout rates continue, those workers will start their jobs unprepared and unqualified[180].

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[178] "Highs and Lows." *Newsweek*, 1990

[179] National Association of State Boards of Education and American Medical Association. Alexandria, Va., 1990

Students of low socioeconomic status have a high potential for dropping out of school. Other significant family-related factors associated with dropping out are single-parent families, parents with low educational and occupational attainment levels, little or no learning materials and positive learning opportunities in the home, and a non-English-speaking home environment[181].

E.J. Price's *Statistics of Public Elementary and Secondary School Systems*[182], a study that tracked students from 1976 through 1980, reveals that 3.6 percent of high school students dropped out between the ninth and tenth grades, 10.2 percent dropped out between the tenth and eleventh grades, and 10.4 percent dropped out between the eleventh and twelfth grades. Of those students who enter twelfth grade, 7.1 percent leave school prior to graduation. The dropout rate for Hispanic students leads all race and ethnicity categories. The 1984 dropout rates for Hispanic males and females up to age 34 were 27.0 percent and 26.7 percent, respectively. Next in dropout frequency were black males (15.7%) and black females (15.0%)[183]. Floyd Hammack's "Large School Systems' Dropout Reports: An Analysis of Definitions, Procedures, and Findings"[184] examined school district reports on the dropout problem in Boston, Los Angeles, Miami, New York City, San Diego, and Chicago. Hammack found that, although national estimates of eighteen-year-olds who have left school before receiving a diploma range from 18 to 25 percent, the estimated rates for these large urban centers with heterogeneous populations are often twice as high, and for some subgroups of urban students the dropout rate has been reported at higher than 60 percent.

External Forces

Many external forces impact dropouts and at-risk students. The success or failure of the nation's youth depends in a large part on the extent to which the federal and state governments, community, school, and family work together to address the special needs of dropouts and at-risk students.

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[180] Dreyfus. "The Three Rs on the Shop Floor." *Fortune*, 1990

[181] Rumberger. "High School Dropouts: A Review of Issues and Evidence." *Review of Educational Research* 57, 1987

[182] Office of Educational Research and Improvement, Washington, D.C.: U.S. Government Printing Office, 1980

[183] Rumberger. "High School Dropouts: A Review of Issues and Evidence." *Review of Educational Research* 57, 1987

[184] *School Dropouts: Patterns and Policies*. Edited by Natriello. New York, 1987

Federal and State Government Policies: Impact on Schools

In September 1989, President Bush convened an historic Education Summit with the nation's governors in Charlottesville, Virginia, and ask these state leaders to set national goals for the educational system and to develop a domestic strategy for achieving their objectives[185]. Among the priorities established at this conference was a commitment to dropout prevention. The President's budget included a $490 million, or 34 percent, increase to the Department of Education to improve the quality of the American educational system. One of the identified goals was to determine what "works" educationally in reducing the national dropout rate.

The Texas Legislature in 1987 established an interim study on the state's dropout problem. This study committee, chaired by Representative Ernestine Glossbrenner and Senator Gonzalo Barrientos, issued chilling statistics about the dropout rates in Texas: 34 percent of Texas students fail to graduate from high school. Because of the high dropout rate, the state faces billions of dollars in costs and lost revenue. The legislature that year approved a series of bills to combat this problem[186]. In particular, Texas HB 1010 requires each school district to establish at-risk programs and to monitor and collect data related to dropouts. It also established the goal of reducing the dropout rate to no more than five percent[187].

Dropouts attempt to enter the job market but are poorly equipped to deal with the demands of a rapidly changing economy. Many are illiterate. In fact, at least ten percent of the American population is illiterate and cannot read, write, or add well enough to perform the tasks required to gain or maintain employment in the areas where demand is the highest. Glen E. Lich implies that "literacy" facilitates or enables people to be leaders in our society[188]. He adds that since a society's concept of literacy changes over time, important questions such as "What do I really need to know to survive and foster the dignity of the community in the future?" must be asked today.

In response to the literacy issue and the high correlation of literacy to dropouts, schools need to provide students not only with skills in reading, writing, arithmetic, and vocational training, but also with the personal and social skills required for long-term success as citizens, parents, and workers in a complex and changing society[189]. The business community is concerned with school practices in developing future employee-students. The New York Committee for Economic Development indicated that if schools tolerate excessive absenteeism, truancy, tardiness, or misbehavior, their students will not meet standards of minimum performance or behavior either in school or in society. A student who is allowed to graduate with numerous unexcused absences, regular patterns of tardiness, and a history of uncompleted assignments will make a poor employee[190]. Thus, schools are increasingly expected to teach children not only how to think, but also how to act responsibly. Keeping students in school is a prerequisite for building a trained and skilled work force, but retention alone is not sufficient for the task. In the future, employers will need graduates who have more than basic skills[191].

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[185] The State of Texas Office of State-Federal Relations "President Bush's FY 1991 Budget Proposal: An Analysis of Its Possible Impact on Texas." 1990

[186] Veninga. *Education for the Twenty-First Century.* Vol. 5. *Preparing for Texas in the 21st Century: Building a Future for the Children of Texas.* Austin, Tex., 1990

[187] Report on 1987-88 Public School Dropouts. State Board of Education: Texas Education Agency: Division of Resource Planning Austin Publication Number FS9-742-03

[188] *The Humanities and Public Issues.* Vol. 3. *Preparing for Texas in the 21st Century: Building a Future for the Children of Texas.* Austin, Tex., 1990

[189] Wehlage. "Effective Programs for the Marginal High School Student." *Phi Delta Kappa Fastback* 197, 1985

The issue of multidimensional education is further complicated because schools sometimes contribute to the problems of at-risk students when they raise educational standards. Extending the school day and increasing the number of credits needed to graduate in some cases increases the dropout rate. Consequently, school reform has been blamed, in part, for an increase in dropouts[192].

Foundations as a Funding Source

Because dropouts impact all areas of society, the responsibility for finding a solution that will reduce the dropout rate lies with all affected groups. Many pilot programs which work with special school-age populations have been supported and funded by philanthropic foundations. The success of a dropout or at-risk program may be indicated by the number of times it has been re–funded by an organization. Pilot programs are sometimes initially funded by foundations and later written into the budget of another source, such as a school district.

Types of Dropout and At-Risk Programs

There are three general types of programs—reactive, preventive/proactive, and remedial—which address dropouts and at-risk students. Each type attempts to reduce the dropout rate at a different stage of the dropout process. Reactive programs approach dropout problems in the latter stages, working with students who have already dropped out of school. Preventive/proactive programs approach the problem in the earlier stages of the dropout process, addressing the needs of at-risk students who are still in school. Remedial programs also address problems of dropouts and/or at-risk students and usually include a training component which correlates with the skills needed to work in community businesses. The next section cites model programs which have had differing levels of success and longevity and which adhere to one or more of the program types mentioned above. After this list of model programs is a discussion of four outstanding programs chosen because of long time success and replicability.

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[190] Committee for Economic Development. *Investing in Our Children: Business and the Public School.* New York: CED, 1985, 30-35

[191] Texas Research League. "Student Retention: Redefining Success." *Analysis* 10, 1989

[192] White,J. School reforms blamed for increase in dropouts *Austin* (Texas) *American-Statesman*, Dec. 10,1987

Characteristics of Model Programs

Many dropout prevention/intervention programs nationwide address the needs of local communities. However, most effective programs contain four components—groups of 25-100 students and two to six faculty members; a teacher culture (teachers who believe students deserve a renewed opportunity to learn); a student culture (students who gain admission to the program and recognize that a behavior and attitude change is necessary); and a curriculum and instruction that is substantially different from what is ordinarily found in high schools[193].

The Urban Superintendent's Network, a group of public school administrators from major cities throughout the nation working under the sponsorship of the United States Department of Education's Office of Educational Research and Improvement (OERI), published a booklet which addresses the dropout problem[194]. The superintendents call for a joint effort to keep more youngsters in school until graduation and to develop more productive citizens. The booklet describes six strategies which will benefit the at-risk student: intervene early; create a positive school climate; set high expectations; select and develop strong teachers; provide a broad range of instructional programs; and initiate collaborative efforts.

Many model programs have had short-term success. However, since several programs have only recently begun to keep evaluative data on students, more longitudinal studies are necessary before true model programs can be implemented in settings that relate to special populations. To improve academic standards, some schools with successful programs increase the school day and the school year. For example, Duval County, Florida, added 30 minutes to the school day, and the dropout rate has not increased as predicted by some critics. Some districts provide evening, after school, or weekend classes which enable some students who have jobs or families to complete their educations. Still other school districts offer summer school to students who need to make up missed work. In Project SMART (Summer Math and Reading Tasks) of Buffalo, New York, students in grades three to six complete assignments at home and receive evaluations and answers through the mail.

Many school districts' efforts to keep students in school involve positive actions while other schools choose negative actions. Some positive actions involve incentives such as pizza parties in Chicago, after-school and summer jobs in Philadelphia, used cars drawings in Milwaukee, and enrollment (at state expense) of American Indian youths in private schools in Minnesota. One of the deterring factors in such programs is high cost. To help defray the costs of such programs, dropout prevention programs are usually paired with sponsoring businesses. Some negative actions by schools include laws that deny driver's licenses to dropouts under the age of eighteen (such as West Virginia's "no-pass, no-drive" law).

As previously noted, blacks have the second largest dropout rate in the nation. Jawanza Kunjufu, president of the Chicago-based publishing and consulting firm African-American Images, has proposed a program that emphasizes homogeneous grouping of large numbers of black males to reduce the dropout rate of this group[195]. Although segregating public high schools by race and sex seems to be a drastic answer to lowering the dropout rate, some see it as a plan worth trying. Kunjufu believes that the all-black, all-male classes may be one way to keep young black youths in school. He predicts that, if the educational system cannot find ways to curtail the rising dropout rates, by the year 2000 up to 70 percent of the black men in this country may be incarcerated, on drugs, or in other ways unable to be heads of households. He knows that the present system is not meeting the needs of these at-risk students. Statistics reveal that 41 percent of the black high school students in public schools are in special education classes. Of those, 85 percent are male. Furthermore, 37 percent of these black males are regularly subjected to suspension. In Kunjufu's plan, black male students are to be provided with the role models desperately lacking in their society. His plan has been implemented in a co-educational school in Newark, New Jersey, with one class of 25 black males in the fifth and the sixth grades. None of the students who participated in the program had to repeat the year or attend summer school classes—some even made the honor roll.

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[193] Wehlage. "Effective Programs for the Marginal High School Student." *Phi Delta Kappa Fastback* 197, 1985

[194] "Dealing with Dropouts: The Urban Superintendents' Call to Action." Washington, D.C., 1987

Kunjufu's segregation plan has had only lukewarm support from the National Education Association (NEA), but the Executive Director of the National Alliance of Black School Educators feels that we must re-examine the way we are training young black men, and if segregated training is successful, then it must be viewed as a viable alternative to current methods. In most instances segregation is viewed as regression. Joe Clark, former New Jersey high school principal, commented to a group of college students that legalizing segregation would only hinder the progress of education[196]. In reality, public schools will not make such drastic changes as those proposed by Kunjufu on a large scale.

Outstanding Model Programs

The four programs discussed below provide outstanding model programs. Two successful programs which have been in existence for over 20 years deserve mention—the Philadelphia High School Academics Program and the School Development Program in New Haven. They both involve external resources in the community and the home. The other programs, although only established within the last decade, also offer school and communities an opportunity to make a difference in the lives of youth in their communities.

Philadelphia High School Academics

One of the oldest and most successful pairings of business and education is in Philadelphia. This 20 year old program is offered at 14 of the city's 21 high schools and integrates academic courses with vocational training in auto mechanics, business, and other careers. The program recruits at-risk eighth graders and pays them $5.75 an hour for after-school and summer jobs. More than ninety-three percent of the students who enter the program graduate.

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[195] Lyons. "Homogeneous Classes May be Best Way to Curb Black Male Dropout Rate." *Black Issues in Higher Education* 6, 1990

[196] Texas A&M University, Nov. 1990

New Haven School Development Program

For more than twenty years the School Development Program, commonly known as the Comer Process, has involved schools and parents in an effort to improve the educational system in New Haven, Connecticut. Dr. James P. Comer, a Yale University psychiatrist, developed the program which has resulted in higher attendance, fewer behavior problems, and improved academic performance for all students, especially at-risk students. This program's emphasis is on a custom-tailored curriculum for each child, awareness of and involvement in each child's home life, and building relationships based on sharing. This program brings school administrators, staff, teachers, and parents together regularly—often daily. This constant interaction among the school, administrators, and parents provides students and parents with a sense of active participation in the educational system.

The program's success is evidenced by its replicability. More than 100 schools in nine districts in eight states have adopted the Comer process. The New Haven school system has also expanded the program to include all 42 schools in the 18,000-pupil system. The Rockefeller Foundation has committed $15 million to help other school systems replicate the process. Hugh Price, a Rockefeller vice president, stated that results of the Comer process have been especially impressive in reaching students considered "at-risk." A study of schools in Benton Harbor, Michigan, using Dr. Comer's approach revealed significant improvement in student performance and behavior. Suspensions in schools using the approach dropped 8 percent while suspensions in the district as a whole rose 34 percent. Similarly, students in the Comer schools excelled in reading and mathematics. In reading at the second-grade level, the average gain in the Comer schools equaled that of the district as a whole; at the fifth and sixth grade levels the Comer schools, on the average, surpassed district-wide averages[197].

I Have A Dream (IHAD) Foundation

The I Have A Dream (IHAD) program began in 1981 with a pledge by multimillionaire–philanthropist–inventor–entrepreneur Eugene Lang. Lang's pledge to adopt a graduating class of sixth graders from New York's East Harlem and see them through high school and into college was the beginning of the I Have a Dream Foundation. Lang's initial efforts were encouraging: of the 51 students who remained in the area, 36 are in college and nearly all of the others are employed. Four years after the program's inception, national donors became involved in helping youth physically and financially. Several sponsors have contributed more than two million dollars to the program. Among them are the owner of a design company; Tom Werner of the Carsey-Werner Co., producers of "The Cosby Show" and "Roseanne"; an executive of the Massachusetts Mutual Insurance Co., and the owner of the K.T. Furniture Co. in Gardena, California. The key to the program's success is the structure it offers to young people who had formerly lost hope in their situations. The program has been implemented in California and a similar one implemented in Louisiana. These programs continue to struggle with environmental and peer influences upon students. The students in the program are referred to as "dreamers" and see their actions of doing better in school and society as "keeping their dreams alive".

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[197] Marriott, M. "A New Road to Learning: Teaching the Whole Child". *New York Times* June 13, 1990, p. 1

The program hires project coordinators (PCs) who accept a six-year commitment and who are on call 24 hours a day. Students receive several hours of academic tutoring twice a week in math, reading, writing and geography. A ten-week intensified summer program is also provided for the students. Myrtle Middleton, IHAD's executive director in Los Angles, estimates that 20 of the 314 Los Angeles students will drop out of school before graduation, primarily because of gang activity or pregnancy. However, she feels that 20 out of 314 (or 6 percent) looks pretty good with a dropout rate of 17 percent for all of Los Angeles, and 35 percent for some inner-city high schools. The goal of the program is to keep students in the system so that they can become productive members of society[198].

California Local Educational Reform Network (C-LERN)

The most recent model program for building effective schools is in California. The California Local Educational Reform Network (C–LERN) has become a catalyst for positive change in school districts in that state[199].

The California State Department of Education, in collaboration with teachers, administrators, school board members, parents, students, and members of the business and educational communities, has initiated strategic methods designed to improve education for every student in that state. C-LERN is designed to "empower district superintendents and their staffs to identify and address their specific problems and utilize the unique strengths and creativity of their staffs and communities to 'find its own best way.'"[200]

Unique features of the program include a four-step plan of orientation, diagnosis, prescription, and intervention. C-LERN helps schools focus on the unique needs of each student, including those who are at risk, while helping all students to experience success.

High School and Middle School Dropout Prevention Programs

Dropout programs at the high -school level serve the purpose of providing a place for students who are unsuccessful in the regular high school setting. These campuses are referred to as *alternative schools* or *schools within schools*. However, research shows that initiating dropout prevention programs at the high school level is too late. Most students who choose to drop out of school do not decide to do so based upon circumstances in their junior or senior year; many variables, some starting in elementary school, have influenced the decision to drop out. "Turning Points: Preparing American Youth for the 21st Century"[201] is a report on middle school education produced by the Carnegie Council on Adolescent Development of the Carnegie Corporation of New York. It contains eight recommendations for improving the educational experience of middle graders, placing special emphasis on at-risk students. The January 1990 *Forum* publication describes programs in Texas which illustrate the eight recommendations.

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[198] Seligmann, J. "Change of a Lifetime." *Newsweek Special Issue* 1990

[199] California Local Educational Reform Network. California Department of Education Specialized Programs Branch, 1989

[200] California Local Educational Reform Network. California Department of Education Specialized Programs Branch, 1989.

1. Create small communities for learning where students are known and respected by peers and adults. For example, the FAME program in Austin ISD requires all adults on each campus to adopt an at-risk sixth, seventh, or eighth grade student.

2. Teach a core academic program that produces students who are literate and that teaches young adolescents to think critically, act responsibly, and develop healthy lifestyles. For instance, the Valued Youth Partnership program in the Edgewood, Harlandale, and South San Antonio ISD's is a cross-age tutoring program in which at-risk middle and high school students serve as tutors for at-risk elementary students. Both tutors and students report improved academic achievement. This model has been selected as one of the country's ten best programs by the Department of Education.

3. Insure success for all students by eliminating tracking and by promoting cooperative learning and flexible instructional schedules. TAAP (Transitional Academic Achievement Program) in the Lubbock ISD offers a condensed curriculum for at-risk middle grade students. TAAP students can go through middle school in two years rather than the three required by most students.

4. Empower teachers and administrators to make decisions about the learning experiences of middle grade students by creating governance committees that design and coordinate school-wide programs to link teachers and students. The Texas Education Agency requires principals to prepare campus improvement plans in cooperation with faculty and staff members.

5. Staff middle schools with teachers who are expert at teaching young adolescents. For example, in Garland ISD the Model for At-Risk Students program requires that teachers attend in–service meetings for six months and train in areas addressing adolescent needs.

6. Improve academic performance by fostering the health and fitness of young adolescents. For instance, the LIFT program (Loving Intervention for Teens) in Richardson ISD involves parents in providing drug awareness, education, and intervention services for middle school students.

7. Re-engage families in the education of young adolescents. In Brenham ISD, The PALS program (Parents Are Links to Success), based on teacher-made handbooks for parent involvement, presents appropriate parent/child educational and social development activities for parents of children in kindergarten through eighth grade.

8. Connect schools with communities by identifying service opportunities for students and by establishing community- and business-school partnerships. For example,

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[201] *Forum: Texas Dropout Information Clearinghouse 2*, 1990

in the Twain/Trinity Cooperative in North East San Antonio ISD, students and faculty from Trinity University serve in an after-school program as tutors and mentors for at-risk middle school students.

Costs of Dropouts

The costs of the dropout problem can be considered in various ways.. The projected monetary cost to the nation for the estimated 13.6 percent of students who dropped out of the class of 1982 is more than $55 billion over their life spans[202]. Furthermore, businesses are affected by dropouts through lost productivity since students who drop out are often not capable of performing at the level of those who graduate. In addition, employers are reluctant to promote dropouts even after the dropout has been hired, and the Army hesitates enlisting dropouts because of a *quitter* attitude.

Texas State Senator Gonzalo Barrientos, co-chair of the Special Interim Committee on High School Dropouts, stresses the costs to the state caused by dropping out of school in the following four points.

- Almost two-thirds of adults with incomes below the poverty level are high school dropouts.
- Two-thirds of *Aid to Families with Dependent Children* payments are made to individuals who are high school dropouts.
- Each dropout *class* costs the state over $17 billion in direct costs and economic losses.
- Almost 90 percent of the Texas prison population dropped out of school.

Barrientos further states that, according to 1989 expenditures, incarcerating a prisoner costs $14, 600 per year while keeping a child in school costs only $3,600 per year.

Recommendations

1. Society must first become aware of the gravity of the dropout problem, and then it must establish links between the groups involved—community, school, and home—if the nation is to attain a graduation rate of 90 percent by the year 2000.

2. Collaborative endeavors among the community, school, and home will create a deeper understanding and trust among the groups involved.

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[202] Natriello, Pallas, and McDill. "Taking Stock: Renewing Our Research Agenda on the Causes and Consequences of Dropping Out." *Teachers College Record* 87, 1986

3. More model programs, such as the School Development Program by Comer, which involve the community, school, and home must be identified, expanded, given support funds, and replicated in cities nationwide.

4. The structure of high school must be reconsidered in order to meet the needs of at-risk and dropout students. Flexible school hours and course arrangements should be investigated in order to keep more students in school.

5. Partnerships between schools, community agencies, and businesses should be created so that the communities or businesses can benefit from helping to produce future employees and schools can benefit from the financial support given by community and business organizations.

CHAPTER FOUR

DOING DRUGS AND DROPPING OUT:

THE COSTS TO WACO

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As a parallel to the research reviewed for this report, the Regional Studies team of faculty and student researchers conducted a core study of the medium-sized central Texas community of Waco, the site of Baylor University. Two key issues in Waco with regard to youth and the community's future—as is the case with the nation as a whole—are drug addiction and dropping out of school. Examining community response to these issues was the purpose for the Waco study which developed into a common-sense, grassroots forum in which concerned Waco citizens, teachers, community leaders, and drug-abuse professionals expressed their views and thereby coordinated community efforts.

The project focused on four areas—government, law enforcement, education, and health care. Researchers gathered and processed information from community action groups, the criminal justice community, police, area schools, hospitals, and treatment facilities.

The Waco research began in February 1990 and concluded in March 1991 with the publication of a free public service booklet on the costs to Waco of drug abuse and dropping out of school. The publication discusses some of these issues' near- and long-term costs in human terms, how Waco is taking action, and ideas for addressing these issues on a nationwide scheme. A media package will interpret and communicate the findings of the project.

The study is intended to help the city's citizens ask—and to take a hand in answering—what addiction costs a place like Waco, its economic community, and the nation. The project identifies some of the agencies, programs, and policies already showing a positive impact on addiction, and likewise identifies common issues related to addiction and dropping out, as well as locates gaps in the city's approach to dealing with these issues. Last, the publication calls for everyone who reads the text to become part of the solution. In summary, then, this project aims to survey the economic costs, the sources, and the local resolution of two problems which threaten the community's and the nation's future.

The benefits to Waco of this study of drugs and dropping out of school has been threefold: *(1)* the product gives a kind of "state of the union" address on Waco, drugs, and education; *(2)* the process by which researchers and community members published this study encouraged schools, colleges, universities, public agencies, and city, county, and regional governments to work together; and *(3)* further discussion and involvement has resulted when the Waco booklet was distributed to hospitals, schools, media, service and professional organizations, public agencies, law enforcement agencies, businesses, problem-solving groups, and special meetings of concerned citizens and community leaders. Developing a broad base of community concern and involvement was, of course, the fundamental objective, for only as people actively engage in civic conversation do we really become citizens. This process starts for most people at the local level.

The objective of this investigation was to tell the story of drug addiction and the often connected problem of dropping out of school to the public and to local community leaders in social and financial terms.

It is, after all, the reduction of social crisis to conceivable financial terms which motivates the average citizen to action.

The publication is also be a "hands-on" reference which can be used in several ways. It describes how a community can, by coordinating and integrating efforts, best use available resources. The booklet has increased awareness of the issues in the Waco area by presenting facts and figures as to the scope of the problem. It also clarifies the issues by identifying areas in which local organizations and individual citizens can actively participate and thus become a part of a community-wide response to drug abuse and dropping out. In short, the service booklet presents the question of what a community, specifically Waco, can do about drug abuse and dropping out of school; or, stated perhaps more holistically, about what a community can do to become a community again.

Profiling Drug Users and Dropouts

In developing effective policies to reduce losses of human potential, we need increasingly in the manner of the Socratic dictum to "know thyself"—to concentrate on people, personalities, alternatives, motivations, and contexts. The following data from a survey of drug abusers in Waco, to the extent that the sample may be representative, dispel easily–made assumptions that drug abusers are "problem people" or that they belong to a class markedly "other" in character than ours—whatever "ours" may mean in such a context.

In an attempt to characterize a typical drug abuser, Kathleen Gardner, a member of the research team, developed questions to elicit data in three categories: socio-demographic information, drug abuse, and social/self insights. Her sample was made up of 42 respondents presently involved in four different substance abuse treatment centers in Waco. Results indicated that a typical substance abuser in treatment is a male (n=31; 74%) between the ages of 22-34 (n=22; 52.4%) with a mean age of 31, median age of 29 with 24 being the most frequently occurring age (s.d.=10.5). He is third or later in birth position (n=16; 38%) and not adopted (n=41; 98%). He is part of a family that was made up of two parents (natural and/or step) most of the time while he was growing up (n=32;

76%) and who made him "feel loved and accepted" (n=31; 74%). The father's occupation was more either non-professional (n=18; 43%) or professional (n=15; 36%), while the mother's occupation was both non-professional (n=16; 38%) and homemaker (n=15; 36%). Most did not grow up in Waco (n=29; 69%) but those who plan to stay (n=20; 48%) have good or positive feelings about their future in Waco. Eleven (26%) plan to leave the city. Regarding the issue of *drug abuse* within the sample, the Waco evidence suggests that respondents mainly started involvement in drugs because of peers (n=23; 55%) or because they were unhappy and bored (n=19; 45%). First use was with peers (n=28; 67%) and involved marijuana (n=16; 38%), alcohol (n=13; 31%), and other non-cocaine drugs (n=13; 31%). At the time of seeking professional help, non-cocaine drugs (n=23; 54.8%), a combination of drugs (cocaine, crack, alcohol, heroin, marijuana, other; n=12; 28.6%), or only cocaine and crack (n=7; 16.7%) were typical. Those in treatment perceive their drug problem as only a "temporary setback in life" (n=30; 71%). Drug abuse had been occurring for at least eleven years (n=24; 57%), with thirteen (31%) interviewees using drugs for 4-10 years. Drugs were paid for by having a job (n=22; 52%), dealing/stealing (n=9; 21.5%), or other means (n=11; 26.2%). With regard to present personal problems and the events leading up to them, the patients consider "drug use" (n=16; 39%) and "boredom/unhappiness" (n=14; 34%) as the most frequently listed primary problem in their lives. The second–rated problem includes "drug use" (n=18; 44%) and again "boredom/unhappiness" (n=10; 24.4%). The third most frequently listed problem is that they were "arrested" (n=10; 24%), "bored/unhappy" (n=9; 22%), and "fired from their job" (n=8; 19.5%). When asked specifically, most patients (n=33; 79%) indicated they had been in trouble with the law "because of drugs" but had not been fired from a job (n=23; 55%) in direct relation to drugs.

Another area of interest was the *self and social awareness and insight* of the patient. All responded positively in thinking they are "worth helping" (100%) and that they "contribute much to society that is positive" (n=30; 71%). All "believe in God" (100%), while most (n=28; 67%) believe that "peace, safety and freedom" are important attributes to them in their community and country. Eight (19%) had no opinion on work and six (14%) feel having a job is important. Personal values taught by parents included "respect and love of others and self" (n=22; 52%), knowing right from wrong (n=17; 41%), and religious values (n=3; 7%). They have "college and a profession" in mind for their futures (n=17; 40.5%), "other plans" (n=14; 33.3%), and "to get or keep a job" (n=11; 26.2%); they "plan on getting married" (n=37; 88%) and "having children" (n=31; 74%). Family values include "respect and love of others and self" (n = 22; 52%); "knowing right and wrong" (n = 17; 40.5%), and "religiosity" (n = 3; 7%).

In a creativity instrument, with a scoring scale potential ranging from 100 to 500, given to the same group of respondents, the highest and lowest scores achieved were 403 and 215, respectively. The mean score was 308.2 (s.d.=40.8) with a median score of 314. A high, medium, and low creativity level was then established by dividing the sample fairly evenly into three groups. There were 14 (33.3%) in the low creative group, 15 (35.7%) in the medium creative group, and 13 (31%) in the high creative group. No statistical significance (p=.05) appeared except when considering the variable that addressed the personal values taught to them by their parents and which they want to pass on to their children. Chi square analysis indicates, however, that there is a statistically significant difference.

When one looks at the cohesion scale and the drug most often abused by the patient, findings indicate statistical significance. A combination of drugs is used more frequently (n=12; 28.6%) than any drug alone. When one considers the dimensions of the cohesion scale, statistically significant findings are again indicated. From the low cohesion or "disengaged" families come 40.5 percent (n=17) of the drug abusers, while 26.2

percent (n=11) come from "separated" families, 23.8 percent (n=10) from "connected" families, and 9.5 percent (n=4) from the "enmeshed" high cohesion families. There is a larger proportion (n=21; 50%), however, in the central two family types of "separated" and "connected." Furthermore, when one considers the four dimensions of the adaptability scale, statistical significance (p = .04) is suggested in a comparison of the patient's trouble with the law because of drugs the patient's family life. Thirty-eight percent (n=16) of the respondents came from "structured" families, while 26 percent (n=11) were from "flexible" families (both are considered a mid-range and/or balanced family). Only eight respondents (19%) came from "rigid" and seven (17%) from "chaotic" families.

The text which follows in this chapter was produced by the Regional Studies Center at Baylor University and supported by a grant from the Cooper Foundation in Waco. This community service booklet, *A Question of Community: Waco and Drugs,* offers one example of the results that can be achieved by collaborative efforts of scholars, students, and community leaders.

A QUESTION OF COMMUNITY

WACO AND DRUGS

A Question of Community: Waco and Drugs is a self-help guide for the greater Waco area to address the issue of drug abuse with its three attendant problems: the burden of spiralling enforcement, health care, and rehabilitation costs; the additional costs imposed on society by lost productivity and lost human potential; and the threat to community.

Our attempts to solve these problems have proved more costly than effective, in part because, as national critic Ethan A. Nadelmann asserts, the issue "has been captured by its own rhetoric and effectively immunized from critical examination." In an essay entitled "U. S. Drug Policy," published in *Foreign Policy* in 1988, Nadelmann warns that laws, for example, cannot protect a nation from drugs when that nation's appetite for drugs grossly exceeds the ability of the criminal-justice system to protect drug consumers from themselves, and also when, despite the harsh rhetoric of a "war on drugs," that nation demonstrates a remarkable lack of consensus. We must, according to Nadelmann, acknowledge the limitations of government. We have to engage in honest, open debate about our policies. We should recognize the clear need for moral authority and personal responsibility. We have to develop workable, grass-roots solutions.

In terms of the full range of economic costs, a recent Congressional report suggests that drug abuse costs every American between $245 and $508 a year (or between 67 cents and $1.39 a day), based on 1988 dollars. In addition, however, to the direct and indirect costs which can perhaps be calculated in monetary terms, how does one actually measure the costs in lost human potential of, for example, crack babies who suffer for a lifetime because of their mothers' drug abuse? How, furthermore, do we measure costs in terms of a lost sense of community—the sense of estrangement aroused by crime and addiction—which causes many of us to act as if drugs were *someone else's* problem, not ours, thereby absolving ourselves of responsibility.

Figures rise with each new study as society becomes aware of increasingly broader dimensions of what drug abuse really costs—directly and indirectly—in terms of education, citizenship, community life, happiness, and national well-being. Yet what these studies also leave us with, beyond the staggering picture of rising financial obligations, is a string of almost impossible questions: about who pays and in what ways we pay, about how long we can continue to pay, about how such figures can possibly be accurate, about our educational system, and about why we have let a problem of this kind develop to the degree it has developed in a country founded on the principles of self-enterprise and human dignity.

Questions arise, too, about what the facts really are. Questions about how deep the underlying problem is. And about what the problem is.

Questions, as well, about what to do.

And about who should be doing things. The national government? The states? Cities, communities, schools? Law enforcement? Parents?

Questions about who can make a difference.

Information, Suggestions, . . . and more Questions

This booklet results from conversations among researchers, legislators, students, teachers, and city officials. Not something to be read and put aside, this booklet is an invitation for further discussion—and action—on problems which cities and towns throughout the country must address in a thoughtful, but active, manner if they are to remain viable as communities. If it is true, as the author of *The Humanities and Public Issues* (see back cover for reading list) states, that "Preservation of community . . . should . . . be the highest social goal toward which we can strive," then it is also true that the loss of community is "the single most serious human issue." This text on Waco and drugs therefore raises some difficult and often embarrassing questions about the family and community values which are at the heart of drug issues.

Furthermore, *A Question of Community: Waco and Drugs* puts problems such as drug abuse into the context of community and argues that such problems can be resolved only if many people work together.

In the attempt to explore the issue of illegal drug abuse from as many aspects as possible, *A Question of Community* invites public discussion of what is fact and what is fiction in the "drug crisis." The booklet asks—with urgency—how effectively Waco is dealing with the drug issue. It asks too—again with urgency—whether the citizens of Waco will develop and pursue realistic plans of action to solve such major community problems which impact seriously on the city's well-being.

How to Start

Doing something about drug abuse, and in a larger sense about citizenship and education, requires a local commitment to what has become a national problem. However, national problems cannot always be solved at the national level. Nor can the problem of drug abuse—which is really a "cluster" of causes and effects—be resolved without coordinated efforts in government, schools, health care, law enforcement, and other community institutions.

In order to identify and analyze the community's ability to address the problems of drug abuse, and in order to coordinate efforts, Waco must get all its key players—those who have obvious roles (and also those who do not have obvious roles but who could perhaps be very helpful)—around the same table. We all need to understand the purposes of the sundry agencies, facilities, and organizations in Waco which address themselves to drug abuse. The city's record of dealing with drug abuse during the past decade is piecemeal at best; we must define the problem more clearly and more consistently.

In conducting the study which led to the writing of *A Question of Community,* we asked what agencies and activities in Waco—government, treatment, education, community service, and business organizations—are responsible for issues relating to, and are affected by problems resulting from, drug abuse. What, we asked, are these groups doing? How well are their efforts coordinated? What other organizations, we asked community leaders, might be able to respond?

We learned that only in the various agencies associated with law enforcement were anything like clear answers forthcoming. But law enforcement cannot shoulder the full burden . . . nor do many of us likely want to live in a country where moral and ethical issues are enforced by agencies of the law. We must, therefore, assess how best to use the city's resources *in general* and how to determine both our real goals and our potential for success. In this regard, we may not need more resources as much as we need to use more effectively the resources—only some of which may be monetary—which a community like Waco of well over a hundred thousand people can employ if it decides to take some steps which may make a significant difference.

The Costs of Drug Use

Likewise, we need to understand the costs of drug problems—monetary as well as human, short- as well as long-term—in relation to the resources which may be required to resolve the problems.

The full range of expenses—including health care, work force, and law enforcement—costs a typical American city the size of Waco between $47 million and $93 million per year. Health care costs alone range between $6 and $25 million, including increased medical costs to business, the costs of treating AIDS-infected intravenous drug abusers, and intensive-care costs of drug-exposed infants—who are among the most regrettable examples of the human and monetary costs of drug abuse. National studies indicate that 1 in 10 infants is drug-exposed at birth, and that intensive-care costs for these infants average $28,000 each. Based on these national averages, such births (assuming a yearly county average of 3500 births) could cost McLennan County up to $10 million per year as the "drug epidemic" spreads. Applying national data to Waco, the educational costs of teaching drug-exposed children would likely run $22 million annually by the end of the decade. And figures soar as additional impaired children are born each year to an increasing number of mothers who abuse drugs. The 5 percent of the work force that reports being drug-impaired costs Waco employers, in terms of lost productivity, between $7 and $33 million or between $1,700 and $8,025 annually per employee—the wide range reflecting different assumptions regarding impairment rates. While drug experts continue to debate the nature of the cause-effect relationship between drug abuse and crime, and while we all want to understand what is meant by such frequently used terms as "drug-related crime"—the cost to Waco, including lost productivity due to incarceration, is about $34 million annually. Such figures leave us with a feeling of hopelessness with regard to total costs and the ineffectiveness of current policies.

Annual Economic Costs of Drug Abuse

National Figures Applied to Waco Metropolitan Statistical Area
(in millions of 1988 dollars)

Category	High Estimate	Low Estimate
Health-care costs (1)		
Medical cost to business, ICU costs of drug-exposed infants, and AIDS costs resulting from IV drug use	$25.10	$ 6.08
Work-force costs (2)		
Reduced productivity and employment loss	33.41	7.00
Law-enforcement costs (3)		
Crime (including lost productivity for the incarcerated)	34.97	33.70
Total economic cost of drug abuse	$93.48	$46.78

(1) Based on total U. S. population of 246,048,000 and total Waco MSA population of 191,800.
(2) Based on U.S. civilian labor force of 119,865,000 and Waco civilian labor force of 82,233.
(3) Based on U.S. adult pop. (18 and over) of 182,435,000 and Waco MSA adult pop. of 145,000.

Even though we tend to think of "dollar cost" as a handy denominator to assess the size of the drug problem, monetary costs are not the only, perhaps not even the most important, factors to consider. From an investment standpoint, the loss of human potential is probably the most devastating result of drug abuse because such losses persist, sometimes for lifetimes, and because they deny growth to individuals, to families, and to areas of human activity which could, in turn, generate additional growth. For example, some money being spent, or mis-spent, on the "drug war" could instead be directed toward salaries for experienced and courageous teachers, thereby improving educational quality by *investing in people*—the critical element of an educational system criticized both at home and internationally for its inadequacies.

Consideration of the human factor is also essential because we need to understand *why* people *want* to abuse drugs if we ever hope to do something about drug abuse at the point when doing something matters most: at the beginning of the dependency cycle. To do anything less is to "play" at solving the problem in the same way that the little Dutch boy "saved" his village by plugging up the leaking dike with his finger. When government deals with issues like drugs in ways which avoid the underlying problems, there will always be more holes than heroes, more costs than dollars to pay them.

Reasons for Drug Use

Although the foregoing account of civic and personal costs may lead us to think that the real question is how long we can hold up under such a burden, what we need to address is, first and foremost, the question of why the drug problem—alienation, lost potential, broken lives, crime, violence, breakdown of community, more addiction—has grown to such dimensions.

By nature, it seems, humans like to push the limits. We drive a little over the speed limit. We seek excitement. We love the new and the different. We are curious. Curiosity, we like to think, is what makes us human and accounts for our history of great breakthroughs and discoveries. We like to think that we work hard and deserve to play hard and feel good. Some of us like to be daring. Some of us are also self-indulgent, even sometimes lazy. And sometimes we are not very patient. Drugs are a means for us to exceed our limits, and, for some of us, drugs can be tempting shortcuts to happiness.

For many young people, drug abuse is (or starts as) a thrill—not any different from the hundreds of other habits or pranks which hundreds of generations have used to establish their own identities and to shock their elders. For these people—the first-time users and perhaps also the recreational users—drugs promise a release from restlessness, a sense of identity and solidarity, an easy achievement to boast about to friends. A shortcut to making one's mark. But such innocence can carry a lifelong price tag when young people turn to drugs, whether crack, or any others of the succession of "wonder" drugs from LSD to "ice," which an inventive and experimenting culture can make and want.

So where can we turn to begin looking for answers? When we attempt to discover the source of what develops into drug problems, the argument surfaces that humans have a basic desire to alter states of consciousness for enjoyment which manifests itself early in life. When children hang by their legs from monkey bars, soar as high as possible from swings, and twirl each other around until they fall down, they replace their normal consciousness with sensations of dizziness—thereby experiencing a kind of "high." Likewise in adulthood, consciousness continues to be altered through a variety of means—high-speed driving, exhilarating sports such as sky diving, frightening films, or even long-distance running.

Our culture teaches us to use chemicals. We know that we do not need to cope with such physical pains as headaches and sore throats; we have chemicals such as aspirin to relieve them. Correspondingly, modern wisdom and convention also teach that a few ounces of alcohol or a few lines of cocaine can easily alleviate the emotional pains—stress, depression, isolation—of everyday living. Today more than ever before, we are dependent upon chemicals to alter or adjust our health and our behavior. Some people want to alter their behavior for fun; others want to do so as an escape from the reality or perceived reality of unhappy lives. Still others have a tendency towards self-destruction which leads them to abuse drugs. Not surprising, then, is the comment by treatment professionals that most of their clients not only have problems with drugs but also with life in general. Treatment professionals state that once a drug addict reaches a sober state, the drug problem becomes secondary to personal problems which led to addiction in the first place.

The real point here, if people are honest, is not the ancient saw about yet another generation "going to the dogs." As *The Humanities and Public Issues* states, "Our young do reflect, to our credit or discredit, the lights by which we have guided them." If the young are sometimes self-indulgent, irresponsible, overly curious, and not patient or respectful, it is because they have learned well from the culture their parents have made. Our movies, novels, billboards, cars, clothes, suburbs, and schools tell the story over and over.

Cocaine and Crack

While cocaine may have become associated with the impatient, self-indulgent lifestyle of the 1980s, the reverse side of the cocaine lifestyle came with the arrival and increasing popularity of crack, the drug which symbolized the plight of the poor and uneducated.

Cocaine—the white, powdery substance produced by processing the leaf of the coca plant with a petroleum product, most often gasoline or turpentine—and crack (a smokeable form of cocaine) are among the most common illicit drugs used in Waco. Cocaine is either sold in its powder form (cocaine hydrochloride) or processed into crack, a large amount of which can be produced from a relatively small quantity of cocaine hydrochloride, making crack a considerably less expensive and more easily accessible alternative. While the methods of cocaine consumption vary—snorting, injection, ingestion, and in the form of crack, smoking—the effects may include euphoria, hallucination, and temporary increase in physical energy. With crack, however, the mental and physical euphoria, which after frequent abuse usually lasts only a few seconds, is significantly stronger than with cocaine, thus making crack more addictive. Apparently because it is both cheap and potent, crack is the current drug of choice among the drug-using population of Waco.

About Drugs in Waco

Among those treated in Waco for drug abuse, approximately three-fourths are treated for cocaine and/or crack abuse. According to treatment professionals, the abuse of crack has been increasing in Waco since it was first noticed here by police and medical professionals in late 1985 and early 1986, coinciding with the appearance of the drug nationally.

The size of Waco's drug-using population is not known. But law enforcement officers know where many of the drug dealers sell their drugs, and they concentrate their efforts in these areas accordingly. As a result, most of the arrests for drugs occur in areas of the city where such attention is directed—mostly in poor, minority neighborhoods. One example of such concentrated efforts is the recent establishment of HUD-funded special police patrols in three major low-income housing projects. Such observations lead us to believe that drug abuse is mainly a problem of lower income groups. But, as Martha Rosenbaum points out in *Just Say What?*, "The vast majority of the underclass are *not* drug abusers. There are 33 million Americans living below the poverty line, as compared with the National Institute on Drug Abuse figures of 800,000 weekly users of cocaine and nearly 500,000 users of crack."

Preconception and prejudice have no place in the formulation of our solutions. Drug abuse, we must understand, is not a racial, social-class, or financial-bracket issue. *Every* ethnic, financial, social, and age group in Waco is infiltrated to some extent by drugs. Furthermore, crack abuse is not confined to cities but is a problem, as well, in Marlin and Moody and Gatesville—for which communities Waco serves as a regional distribution point. While precise estimates are impossible to make, the Waco Police Drug Enforcement Division estimates that drug consumption in Central Texas is significantly above the per-capita average for the nation as a whole.

Most national drug policy experts believe that the federal government's current reliance on enforcement as the main thrust of the so-called "war on drugs" is impossibly overburdening the police, courts, prisons, and probation and parole officers. Assuming that what these experts say is true on the *local* level, we should examine the local record of drug-related arrests and drug-related court cases in order to determine how effectively we are dealing with both the immediate issue of crime and the long-term issue of repeated offenses. How much money are we spending to keep offenders in jails? What policies might more effectively address drug-related crime? And who are the offenders?

In a survey of selected Waco citizens currently seeking treatment for cocaine/crack abuse, respondents were asked to identify the reasons for their abuse of drugs. Boredom and unhappiness were cited most often among this group. Other results of this survey indicated that the typical substance abuser in this group was a male between the ages of 22 and 34. He grew up in a family comprised of two parents (natural and/or step) who made him "feel loved and accepted." Most were not raised in Waco, but those who planned to stay in Waco had good or positive feelings about their futures in the city. Respondents noted that their first use of any controlled substance involved either marijuana, alcohol, or yet other drugs than cocaine or crack. The majority of the respondents had been using drugs at least eleven years and supported their habits by having a job, dealing drugs, or stealing. All responded positively in thinking they were "worth helping" and that they "contribute much to society that is positive." All believed in God while most also believed that "peace, safety, and freedom" in their community and country are important attributes. Personal values taught by parents included "respect and love of others and self," knowing right from wrong, and religiousness. Nearly half had "college and a profession" in mind for their futures.

The results of this survey, which concentrated on people who could afford to pay for treatment and who are therefore not necessarily representative of all drug abusers in Waco, demonstrate an important, though perhaps not always recognized, fact: Drug abusers are not necessarily uneducated criminals who come from broken homes.

Yet some people believe we should treat all drug abusers as hard-core criminals, deterring drug abuse through fear. So far this approach has not worked. Whether a person's drug problems are created by the individual's own irresponsibility or by economic, political, and social conditions, there is no clear consensus as to how to help drug abusers. If we examine the causes of drug abuse, we can discover broad needs of society as a whole. However, addressing drug abuse from this perspective may require courage. As Rosenbaum so clearly charges in *Just Say What?*, talking about the drug problem has provided "a useful diversion in avoiding the more dramatic reforms necessary in existing political, economic, and social arrangements." If it is true that we have sometimes used drugs as a scapegoat to blame for complex problems confronting our schools, cities, and nation, it is probably also true that strong talk has replaced action.

Militant rhetoric on the part of political leaders and sensationalism on the part of the news media have helped stir up public support for a "war on drugs"—a confrontation which we are losing. The current strategy in the war on drugs has produced few positive results. More often than not the public is simply unable to identify any results of this so-called war. Reportedly, cocaine use has leveled off overall—and may even have declined among high school students. But have we had an overall reduction in drug abuse? Or has there simply been a shift in the preference of drug abusers to choose certain drugs over others?

Suggestions for Waco

This section offers eight suggestions of what Wacoans can do without waiting for federal and state leadership, legislation, or funds. The suggestions are simple, but not effortless. However, they are realistic and regenerative measures which, wholeheartedly approached and applied, can become a model for Texas and the nation.

Build a local self-help attitude to dealing with problems which threaten the community's children, youth, and families. The report, *Code Blue: Uniting for Healthier Youth*, recommends that communities establish local coordinating boards to monitor and address community problems associated with children, youth, and families. A council like this one should represent all key public and private agencies which serve youth. By networking all different areas, a unified effort to address problems in the community can be achieved. A local coordinating council for Waco ought to include the following: mayors of the greater Waco area, the public health director, superintendents of area schools, drug prevention and at-risk coordinators for area schools, a juvenile court judge, the Parks and Recreation director, local religious leaders, interested business leaders, representatives from Baylor University, McLennan Community College, and TSTI, and representatives from local charitable and service organizations. In order to link the group with agencies of the federal and state governments, the local council should also include the state senator and the state representative. The emphasis for this proposed group should be on getting something done; therefore, the group should meet in a local government building on a bimonthly or quarterly basis, with its own elected convener, to receive and share information. In the words of the authors of *Code Blue,* the purpose of such an organization should be to "strengthen cooperation among local officials and organizations and to identify and remedy conditions which hinder or prevent the community's youth from becoming healthy, productive members of society."

To this end, the Waco Youth Collaboration was formed to monitor and address problems associated with children, youth, and their families. Consisting of representatives from about sixty local organizations, the Collaboration meets quarterly. Local studies by the United Way and the City of Waco's Gang Intervention Task Force recommend the formation of coordinating boards similar to the one advocated by *Code Blue* and already in place through the Youth Collaboration. But, as experience warns, we need to concentrate our efforts and not fragment our energy and resources by forming successive layers of coordinating groups to deal with single, or limited, issues affecting our youth.

Abandon the over-simplified, single-issue approach. Drug abuse and other social problems such as dropping out of school, poverty, illiteracy, crime, and hunger, are all interrelated components of the same vicious circle which cannot and will not be solved until the relationship of each of these problems to the others has been determined.

The Waco Youth Collaboration has given top priority to its Strategic Plan, completed in September of 1990, to create a comprehensive, coordinated service delivery system that will address youth and their families holistically. The Waco Independent School District school board has adopted a resolution making its campuses the sites for the development of the system. With seed money furnished by the state Communities in Schools Program and through a partnership of local entities including the Texas Employment Commission and the Texas Department of Human Services, this concept was just implemented at University High School in February of 1991. Additional sites will open as other local organizations make resources available.

Challenge young people with realism. Adolescence can be characterized by exploratory behavior. Despite the stereotype of self-centered and rebellious teenagers, young people are teeming with curiosity, energy, and questions. During this time adolescents come into contact with potential risks: cigarette smoking, alcohol and illegal drug abuse, sexual experimentation, poor nutrition, and sedentary lifestyles. Their struggles with choices and with the desire to grow up quickly can make young people vulnerable to drugs and other problems unless their classes have provided them with better information than they can get in the hallway or locker room. Waco ISD's Quality Schools Program, which works in conjunction with the state Communities in Schools project, is an important step in the right direction. Of course, we have to ask whether we—as teachers, parents, community leaders, school administrators, and public servants—really present the young with believable information and examples of how healthiness and happiness can be achieved without drugs.

Teach health holistically. Are students in Waco public schools taught honestly about drugs in a way that is part of a broad health education program? Or, instead, is our school system spending money unwisely on special programs which separate drug education from the regular curriculum? Drug education, hygiene, physical fitness, sex education, and sports are part of the same subject. Just as some parts of the curriculum address the development of reasoning, aesthetics, and literacy, so too do we need to teach health subjects in broad and comprehensive, as well as specific, ways from kindergarten through the twelfth grade. Young people must gain an overall understanding of health—physical and mental—so that they can make wise decisions about health and fitness . . . decisions for life, and for a lifetime.

Empower teachers and principals with responsibility and authority. Because schools are the common denominator among children, teachers and other school officials are quite possibly the most influential people in any effort to instill values which leave no room for boredom and drugs. But idle rhetoric is not enough; parents must also be willing to support the schools so that teachers of courage and experience can teach with conviction. Many people must work together to establish goals for the education and health of students that promote *mutual respect* and a sense of *shared purpose,* even in settings of socioeconomic diversity. Broadly composed teams of teachers, parents, administrators, support staff, and representatives of community organizations provide frameworks large enough to help principals make the wise decisions necessary to teach the way we really ought to teach. In this sense, people—specifically teachers—can make all the difference. Research conducted recently throughout the states of Texas and California suggests very strongly that successful drug-abuse or at-risk programs are often products of hard-working people who truly care. Successful programs of any kind cannot necessarily be replicated in other situations, because personality and personal involvement, not money and facilities and program design, are the essential ingredients.

Ally families and schools through mutual trust and respect. Many parents, believing that adolescence leads promptly to independence, do not want to intrude excessively into their children's lives. Although adolescents do move toward greater autonomy, they nevertheless need continuing contact, interest, and guidance from their families. Are school administrators and teachers, from elementary schools to high schools, notably active in encouraging parental interest? In fact, some actively discourage it, especially in poor communities where the need for such connections is actually greatest. Schools can re-engage families *(1)* by offering parents meaningful roles in important school activities, such as the decision-making team mentioned in the section above; *(2)* by keeping parents informed of the ground rules and what their expectations should be so they can monitor the progress of their children; and *(3)* by asking parents to foster the learning process at home as well as at school—overseeing homework and helping their children overcome social obstacles. Furthermore, schools can (and some do) offer parenting classes, as well as classes for parents to learn what study skills and basic subjects are being taught to their children. The Region XII Education Service Center and WISD have recently been training personnel to conduct such parenting classes, not only at the schools, but also in local businesses and churches.

Sentence drug offenders to education and public service, not hard time. The prison system has been blatantly unsuccessful in its attempts to "reform" criminals, many of whom are returnees who were not "reformed" during their previous sentence or sentences. A policy of sentencing offenders to prison until they could meet certain standards of education might be an alternative to the current system which seems to guarantee little more than a high probability of repeat offenders.

Develop a volunteer senior citizens program. Communities can make use of one of their most valuable, yet often overlooked resources—senior citizens. The *New York Times* recently publicized a model program in Asheville, North Carolina, which joins the resources of the local university with those of the city through the Center for Creative Retirement which features "leadership for seniors." Senior citizens serve as mentors, teachers, friends, and volunteer grandparents. Because the population of retirement-age Americans is increasing, Waco should very strongly consider ways to link two generations which need each other but which—due to urbanization, mobility, and work patterns—often do not connect. By putting the wisdom of an older generation to work on problems faced by today's youth, we can promote values and also engage a segment of society which our youth-oriented modern world has overlooked. The benefits are high on both sides. As expressed in *The Humanities and Public Issues,* "While young people suffer but cannot miss what they haven't learned to see and value, the elderly suffer and recognize the effects of social division: feeling unneeded, losing a sense of purpose, losing control over one's destiny, not feeling loved, not being touched. The young suffer from inadequate basic care as much as they lack the benefits of associating with more than one or two generations. And yet, if we take a cue from demographic prognostications which show increasing percentages in the population under nineteen and over fifty-nine, we might find more than adequate reason to draw on our human resources to ameliorate some of the problems we foresee worsening in the next decade."

Conclusion

So much for the "beginning" which *A Question of Community: Waco and Drugs* attempts to make. The rest is up to Waco.

In this booklet, we have maintained that solving problems such as drug abuse must be done *within* the community, *by* the community, and *as* a community. The resolution of community problems (whether questions, needs, or desires) will come about through the process of defining what the problems are and how the problems can best be addressed so that all the community's citizens benefit—not only from the actual resolution of problems, but also from the insight into community-building which is gained in the process of resolution.

President Bush recently signed a new law, the National and Community Service Act, which may do much to enhance volunteerism and community service throughout the country. The price-tag for the president's concept is relatively small—far less than some states spend each year on drug-related costs. But the money made available by the new act is not as important as the spirit of the act, which, according to the writer describing it for the *New York Times*, takes the view that "caring for others is *part of citizenship*, that individuals *can* do something to help solve the most intractable social problems" (*italics added*).

By acting in the spirit of these words, Waco and communities all across the country can, in the words of President Bush, "strengthen the American ethic of community service and . . . help translate this ethic into meaningful action."

Acknowledgments

"Madison Cooper, Waco philanthropist and noted author, believed that striving for an ideal community is more important than personal gain. In that spirit, Cooper dedicated himself and his estate through the Cooper Foundation 'to make Waco, Texas, a better place in which to live.'"

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Suggested Readings

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CHAPTER FIVE

RECOMMENDATIONS

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The cooperative efforts of almost 150 people—teachers and parents, health and law enforcement professionals, and officials from state and private agencies in California, Arizona, New Mexico, and Texas—have resulted in three central recommendations. We ask for

(1) an extensive and honest search for fact;

(2) the establishment of cooperative networks to exchange and evaluate information, experience, and local policy; and

(3) hearings on community approaches to drugs and education.

In other words, the single most important thing is the process of engaging in civic conversation—the discourse which translates into actions and keeps communities and nations alive.

The research on drug abuse and its relationship to social factors—such as dropping out, popular culture, gender, race, ethnicity, and region—that was started during the second phase of this assignment should be continued.

Finally, we call for a national mandate to link projects such as we conducted in Waco with the National Community Service Act. This law provides some financial support, but more importantly it can become a means to enhance volunteerism and community service throughout the country.

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